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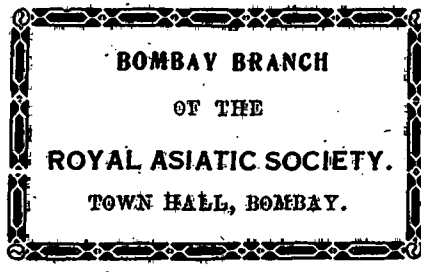

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ENGLISH BOTANY;

OR,

COLOURED FIGURES

OF

BRITISH PLANTS,

WITH THEIR

ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED

OCCASIONAL REMARKS.

BY

JAMES EDWARD SMITH, M.D. F.R.S.

MEMBER OF THE IMP. ACAD. NATURÆ CURIOSORUM, THE ACADEMIES OF STOCKHOLM, UPSAL, TURIN, LISBON, LUND, BERLIN, PHILADELPHIA, AND THE NAT. HIST. SOCIETY OF PARIS;

PRESIDENT OF THE LINNÆAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

55053

"VIRESQUE ACQUIRIT EUNDO." *Virg.*

VOL. XX.

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Campanula
rapunculoides.

Oct.ª 1804. Published by Jas. Sowerby, London.

Fedia dentata.

VALERIANA dentata.

Oval-fruited Corn Sallad.

TRIANDRIA Monogynia.

GEN. CHAR. *Cal.* none. *Cor.* of 1 petal, superior, gibbous on one side at the base. *Seed* one.

SPEC. CHAR. Stamina three. Stem forked, with axillary flowers. Leaves linear-tongue-shaped. Fruit ovate, pointed, unequally three-toothed.

SYN. Valeriana dentata. *Ehrh. Herb.* 122. *Willden. Sp. Pl. v.* 1. 183. *Sm. Fl. Brit.* 1385.

Valerianella altera nudo umbilicato et lævi semine. *Column. Ecphr.* 208. *t.* 209. *f.* 2.

WE alluded to this plant in *v.* 12. *p.* 811, when we were not quite satisfied of its being more than a variety of *V. Locusta*, whose seeds, as well as the leaves, certainly do vary in appearance, though not in essential structure. But on a closer investigation the present seems truly a distinct species. We have received living specimens gathered by E. Forster, jun, Esq. in a cornfield near South End, Essex; and others found by E. Hatton, Esq., near Rowling Wingham, Kent. In the former the herb is smooth, except near the base, with a hispid seed; in the latter the plant is rough, the seed smooth. These circumstances are surely casual variations. The real differences between this and *V. Locusta*, *t.* 811, consist in its stem bearing solitary flowers at each of its divarications, except the very lowest, whereas the flowers of *Locusta* are all in terminal tufts; and in the ovate, pointed, much less swelling seed, whose top is crowned with 3, or more, very unequal teeth, one of them especially being remarkably elongated, and almost leafy.

This species is annual, and flowers in June and July. Ehrhart and Willdenow have distinguished it; but the latter has certainly misapplied the synonyms of Linnæus, Ray, and Rivinus, if not others.

1371
124.

Oct.1.1804. Published by Jas Sowerby, London.

POA rigida.

Hard Meadow-grass.

———o———

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, containing many florets. *Spikelet* rounded at the base. *Cor.* of 2 ovate, pointed, beardless valves.

SPEC. CHAR. Panicle lanceolate, two-ranked, dense, smooth, leaning one way; its common stalk bordered. Spikelets of about seven flowers. Florets cylindrical, without ribs.

SYN. Poa rigida. *Linn. Sp. Pl.* 101. *Sm. Fl. Brit.* 99. *Huds.* 42. *With.* 146. *Hull.* 22. *Relh.* 33. *Sibth.* 42. *Abbot.* 18. *Curt. Lond. fasc.* 2. *t.* 4. *Knapp. t.* 48.

Gramen exile duriusculum in muris et aridis proveniens. *Raii Syn.* 410.

———o———

NOT unfrequent on walls and in dry gravelly places, where it flowers in June, and soon after becomes entirely dry and bleached. It may be known readily by the extreme rigidity of its stems and panicle, which feel at all times as if made of a stiff wire.

Root annual, fibrous and woolly. Stems several, generally erect, (except on the dry sands of the sea shore,) bent at the lower joint, round, very smooth, often purplish or brown, leafy in their lower part. Leaves acute, involute, smooth beneath, rough above. Stipula blunt and torn. Panicle lanceolate, its branches in two rows, leaning to one side; the common stalks zigzag, bordered, rough-edged. Spikelets linear, smooth, neat and elegant, of from 4 to 8 florets, which are cylindrical, bluntish, roughish towards their summits, scarcely keeled, and entirely destitute of lateral ribs or nerves. Their inner valves are fringed. The calyx-glumes are nearly equal, keeled, acute. Antheræ short, deeply two-lobed.

We know not that any agricultural projector whatever has

TRITICUM caninum.

Bearded Wheat-grass.

———o———

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, solitary, many-flowered, upon a zigzag toothed *rachis.*

SPEC. CHAR. Calyx pointed, four-flowered, with about five nerves. Florets awned. Leaves flat. Root fibrous.

SYN. Triticum caninum. *Huds.* 58. *Sm. Fl. Brit.* 159. *With.* 173. *Hull.* 28. *Relh.* 48. *Sibth.* 52. *Abbot* 27. *Knapp. t.* 112.

Elymus caninus. *Linn. Sp. Pl.* 124.

Gramen caninum aristatum, radice non repente, sylvaticum. *Raii Syn.* 390.

———o———

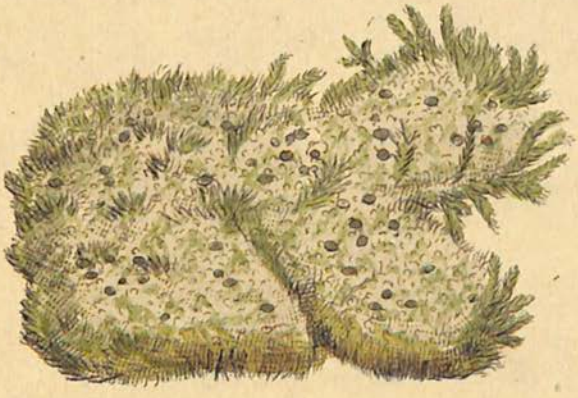
FOUND in woods and about hedges on a chalky or limestone soil, more generally than the *Elymus europæus, t.* 1317. It flowers in July, and is perennial.

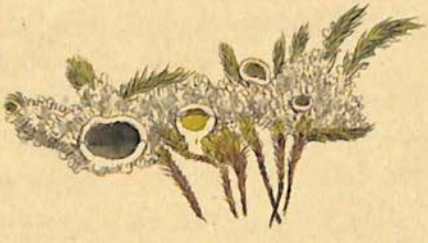
The root is composed of downy fibres, not at all creeping. Stems several, straight, erect, about 2 feet high, leafy, round, minutely striated, but very smooth to the touch. Leaves almost upright, flat, acute, rough, and sometimes hairy, on both sides. The sheaths of the upper ones are smooth, those of the lowermost hairy. Stipula very short. Spike 3 or 4 inches long, nearly erect, but at length drooping. Spikelets alternate, except sometimes the lower ones, each of 3 or 4 flowers, which are lanceolate, ribbed, tipped with long straight rough awns. The inner glumes are fringed. The valves of the calyx are equal, lanceolate, shortly awned, each having 3 or 5 ribs.

If the opposite calyx-valves be attended to, this grass can never be taken for an *Elymus;* its fibrous root, and whole structure, keep it sufficiently distinct from *T. repens.* We presume it is, to the farmer, as unprofitable as the latter, though far less troublesome.

1373

2098





Lecanora chloroleuca?

Pub.d 1 Mch Published by Tho Sowerby London

LICHEN chloroleucus.

Green and white Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Crust white, leprous, very thin. Shields crowded, elevated, flat, olive-green; the margin white, undulated.

WE received specimens of this Lichen (gathered in the county of Durham) so long ago as January, 1799, from the Rev. Mr. Harriman and Mr. Oliver, and we are told of the same having been found even before that time by Mr. Dickson. We have hesitated to describe it, from a suspicion of its being possibly a variety of *L. cerinus*, *v.* 9. *t.* 627: but it deserves at any rate to be known; and Mr. Harriman, who is not at all inclined to multiply the species of this tribe on slight grounds, has no doubt of its being distinct. He informs us that "this is an alpine plant, and is found upon "limestone only, its immediate support being moss or earth, "or sometimes partly earth and partly limestone. The disk "of the shields is at first yellowish green, or rather perhaps "greenish yellow, and at length becomes bottle-green. *L.* "*cerinus* is by no means an alpine Lichen."——The crust appears also to differ, being whiter, more leprous, and very thin. The granulations scattered over it Mr. Harriman finds to be young or abortive shields. The perfect shields are numerous and often much crowded, elevated, white externally, with a white undulated border, much elevated, crenate and leprous when young. The disk is flat; and the tendency of that part to turn more green instead of yellow, as it advances in age, seems a strong proof of the distinctness of the species.

1374
2207.

8

Collema spongiosum?

Oct. 1. 1804. Published by Jas. Sowerby, London.

LICHEN spongiosus.

Spongy Gelatinous Lichen.

CRYPTOGAMIA Algæ.

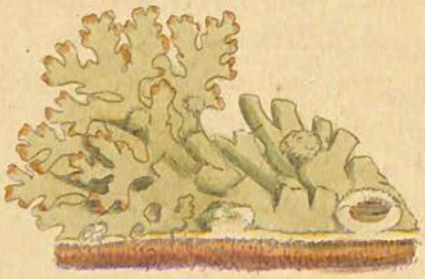
GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Gelatinous, dull green. Leaves clustered, much branched, granulated, cylindrical, obtuse. Shields scattered, concave, brown; externally spongy and pale, with a thin upright margin.

WE are obliged to the Rev. Mr. Harriman for this Lichen also, sent from the County of Durham in 1802. That gentleman informs us he had long passed it over as a *Peziza*, a genus he did not particularly study; but at length he found the leafy crust to be so intimately united with the cups, as to put the matter out of all dispute. After much consideration, we cannot but assent to this opinion; and we conceive this plant to be one of the most curious Lichens, of the tribe of *Collemata*, that has ever been discovered.

The crust is of the dull olive-green hue usual in that tribe, and consists of a very gelatinous spongy mass of thick branched and fingered leaves, whose lobes are cylindrical, obtuse, and granulated. In drying they turn paler and greyish. They readily revive with moisture, and dry again speedily. The shields are sessile, scattered, large, with a dark-chesnut smooth concave disk, surrounded with a peculiar erect thin greenish border; their outside invested with a convex thick and spongy coat, of a light brown or buff colour, which renders them very conspicuous. Mr. Harriman observes the plant to be perennial, and the shields seem to be of long duration.

1075
2161.



Parmelia incurva?

Nov.r 1 1804. Published by Jas Sowerby, London.

LICHEN incurvus.

Incurved Yellow-warted Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Slightly imbricated, membranous, partly crustaceous, pale yellowish green; its segments much divided, narrow, radiating, convex, incurved. Warts yellowish. Shields chesnut-coloured.

SYN. Lichen incurvus. *Persoon in Ust. Annal. fasc.* 7. 24. *Achar. Prod.* 107.

L. multifidus. *Dicks. Crypt. fasc.* 3. 16. *t.* 9. *f.* 7. *With. v.* 4. 28. *Hull.* 294.

SPECIMENS of this elegant Lichen have been sent us from Durham by the Rev. Mr. Harriman, and from Scotland by Mr. G. Don. It grows on quartz and sandstone, only in mountainous countries.

Sometimes the fronds spread in a regular and beautiful circle, but they are frequently interrupted in their growth by the ruggedness of the stones to which they are attached. The centre is almost crustaceous, the margin leafy, membranous, somewhat imbricated, repeatedly cut into narrow divaricated convex segments, whose margins and extremities, wherever they have an opportunity, are incurved. Their edges are often black, but the general colour of the frond is a pale yellowish green, or sulphur-colour. Yellowish powdery warts are plentifully sprinkled over the surface. The shields are more rare, nearly sessile, small, reddish brown, flat, with a thick, elevated, often powdery, margin, of the colour of the leaf.

FUCUS saccharinus.

Sweet Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in clustered tubercles, which burst at their summits.

SPEC. CHAR. Frond leathery, simple, sword-shaped, without a rib. Stalk round, rigid.

SYN. Fucus saccharinus. *Linn. Sp. Pl.* 1630. *Gooden. and Woodw. Tr. of Linn. Soc. v.* 3. 151. *Turn. Syn.* 198. *Huds.* 578. *With. v.* 4. 96. *Hull.* 320. *Lightf.* 940.

F. folio singulari, longissimo, lato, in medio rugoso, qui balteiformis dici potest. *Raii Syn.* 39, with the 3 following varieties.

FREQUENT on all our seacoasts. The root is perennial, formed of a cluster of intricate branched rigid fibres, adhering to shells or stones. Frond solitary, often 5 or 6 feet long, lanceolate or sword-shaped, simple, leathery, ribless, of a dark olive green, rounded at the base, where it unites with the round tough stalk. The margin is undulated, and in some cases sinuated. In old plants the central part is clouded with dark brown, as in our figure. When cut across, a speckled appearance is visible in the internal substance; but we dare not call it the seeds. If so, the plant should be esteemed an *Ulva*. Sometimes the whole frond is blistered like a luxuriant cabbage-leaf, in which state Linnæus described it by the name of *Ulva latissima*. Mr. Turner informs us that this variety is most general on the southern or western coasts, and that Mr. Stackhouse has figured it in his 9th plate, which we have not seen.

When slightly washed from the sea water, and dried in the air, this Fucus becomes covered with a white sweet powdery efflorescence, whence the name is derived. Many curious remarks on this species are contained in Mr. Turner's work.

1377
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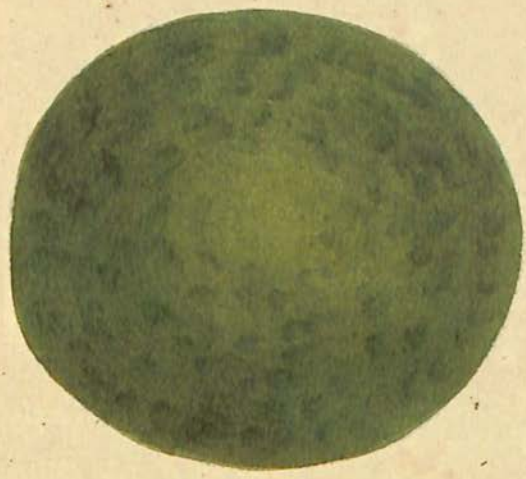


Conferva aegagrophila

CONFERVA ægagropila.

Globe Conferva, or Moor Balls.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in round, solitary, closed tubercles, projecting from the frond, but united with it.

SPEC. CHAR. Green. Stems jointed, repeatedly branched, clustered into a globe and divaricating from the centre.

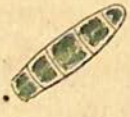
SYN. Conferva ægagropila. *Linn. Sp. Pl.* 1637. *Huds.* 604. *With. v.* 4. 142. *Hull.* 335.

SPECIMENS of this singular production have been sent us from North Wales by the Rev. Mr. Davies, and from a large pool in Shropshire called Culmere, and another named Whitemere, by the Rev. Mr. Williams. They are the growth of alpine lakes in many different countries, and lie in great abundance at the bottom of the water. Their size is from that of a pea to 3 or 4 inches in diameter, and their form always pretty exactly sphærical. Internally they are hollow, and quite destitute of any nucleus. When separated they are found to consist of innumerable green pellucid jointed filaments, repeatedly branched, and firmly entangled together. The joints contain a green fluid substance, which by drying settles in an opaque form at their extremities, as in others of this genus. No traces of real fructification have been observed, though the extreme points of the filaments have an appearance which might be mistaken for such. It should seem that several of these filaments spring from one centre, perhaps fixed to some earthy particle, which, like the Dodder, they soon leave, and their lower parts wither away, while by branching and extending themselves upwards they form a gradually enlarging globe.

Mr. Williams informs us of these balls being used to wipe pens upon. The specific name alludes to their resembling the hairy balls found in the stomachs of goats. Sir William Watson has given the first English account of this plant in the 47th vol. of the Philosophical Transactions.

1378

2555.



Echinella articulata?

Nov.r 1 1804. Published by Jas Sowerby, London.

CONFERVA echinulata.

Little Hedgehog Conferva.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in round, solitary, closed tubercles, projecting from the frond, but united with it.

SPEC. CHAR. Glaucous. Stems jointed, undivided, spreading every way from a centre, and forming a globe.

SENT by the Rev. Mr. Davies from a lake in Anglesea. It covers the surface of the water in the months of June and July, and consists of innumerable minute globules of a glaucous or verdigrise green, all nearly of a size. When examined with a microscope, each globule appears to be composed of a number of simple cylindrical short filaments, spreading in every direction, and apparently springing from a solid centre. Under a very high magnifier these filaments are found to be formed of short uniform joints, each of which is of an equal thickness throughout, but the upper ones gradually diminish in size.

Mr. Turner has suggested to us, that this minute vegetable ought probably to be referred to the celebrated Dr. Roth's new genus of *Rivularia*, to which our *Ulva incrassata*, *v.* 14. *t.* 967, and *U. pruniformis*, *t.* 968, belong. Those species are of a pulpy substance, clothed with jointed filaments. We are strongly persuaded of this being similarly constructed, and not a mere mass of filamentous stems like *C. ægagropila*; but we wish not to decide the question till we have finally determined the genera of this tribe: more especially as we have under consideration a production very similar to the present, though without filaments, found by Mr. Crowe in Norfolk, which seems likely to throw some light upon it.

3,18*

Nov.r 1. 1804. Published by Jas Sowerby, London.

HERNIARIA hirsuta.

Hairy Rupture-wort.

PENTANDRIA Digynia.

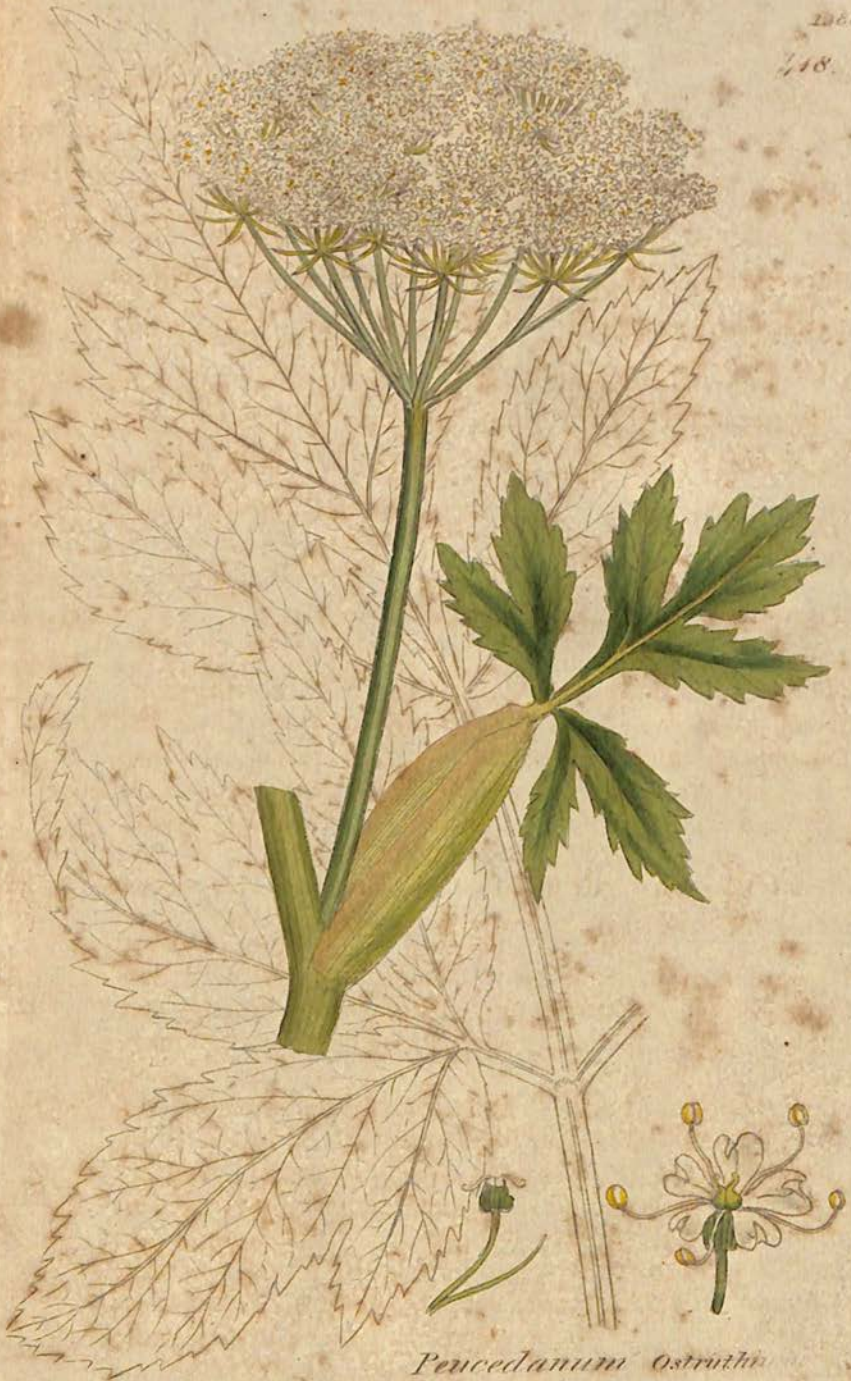
GEN. CHAR. *Cal.* in *5* segments, inferior. *Cor.* none. *Stamina* with *5* thread-shaped scales between them. *Caps.* with 1 *seed*, covered with the calyx.

SPEC. CHAR. Herbaceous and hairy.

SYN. Herniaria hirsuta. *Linn. Sp. Pl.* 317. *Sm. Fl. Brit.* 272. *Huds.* 109. *With.* 270. *Hull.* 57. *Dill. in Raii Syn.* 161.

HUDSON mentions Colney-Hatch near Barnet as the place of growth of this *Herniaria*. We have no authority to confirm or to contradict his assertion; but we are certain that the plant is wild in Cornwall, from whence we have received specimens. It is in general of rare occurrence, and is probably, according to the opinion of Mr. Stackhouse, who has studied it in its native soil, merely a variety of *H. glabra*, *v.* 3. *t.* 206. We are also obliged to that gentleman for the information of both plants being perennial, not annual. They grow in a sandy soil, flowering copiously in July and August.

We can discover no difference between the two, except the present being clothed all over the stem, calyx, bracteæ, and one or both sides of the leaves, with short rigid minute bristles or hairs, with which also the leaves are strongly fringed. We have a Swiss specimen of *H. glabra* which has acquired this pubescence, of a minute size, on its stem only, but which evidently betrays an approach to the more hairy plant now before us.



Peucedanum Ostruthi

Nov.r 1.1804. Published by Jas Sowerby, London.

IMPERATORIA Ostruthium.

Masterwort.

PENTANDRIA Digynia.

GEN. CHAR. *General Involucre* none. *Flowers* all fertile. *Petals* inflexed, notched, nearly equal. *Fruit* roundish, compressed, bordered, swelling in the middle, with 3 ribs. *Umbels* flat.

SPEC. CHAR. . . . .

SYN. Imperatoria Ostruthium. *Linn. Sp. Pl.* 371. *Sm. Fl. Brit.* 327. *Lightf.* 168. *Huds.* 649. *With.* 308. *Hull.* 68. *Woodv. Med. Bot. t.* 35. Imperatoria. *Ger. em.* 1001.

LIGHTFOOT is our only authority for admitting this as a British plant. He noticed it "on the banks of the Clyde in "several places, and in the isle of Bute, near Mount-"stewart," but was uncertain whether it were indigenous or not. The places mentioned seem such as are natural to it. Our specimen is necessarily a garden one.

Masterwort is perennial, and flowers in June. The root is tuberous, jointed, acrid, and aromatic, long supposed a sovereign remedy against all poison. Gerarde says it is "also singular against all corrupt and naughty aire and in-"fection of the pestilence—cures pestilential carbuncles and "botches—cold fits of agues—dropsy—dissolves all vento-"sities or windinesse of the stomache and other parts—and "greatly helpeth such as have taken great squats, bruises, or "falls from some high place," &c. &c. Well might it be called Masterwort! It seems the master key of physic and surgery.——Its qualities and habit are certainly nearly akin to those of *Angelica*, though their botanical characters do not agree. The stem is a foot and half high, round, smooth. Leaves twice ternate, smooth, serrated and cut. Umbels of many rays, flattish, with scarcely ever any general involucrum; the partial ones are of a few narrow leaves. Flowers almost uniform. Seeds with a broad border.

Daphne Mezereum

Nov.1 1804. Published by Ja.Sowerby London.

DAPHNE Mezereum.

Common Mezereon.

OCTANDRIA Monogynia.

GEN. CHAR. *Cal.* 4-cleft, resembling a corolla, withering but permanent, enclosing the stamina. *Berry* with one seed.

SPEC. CHAR. Flowers sessile, about three together, placed on the stem. Leaves lanceolate, deciduous.

SYN. Daphne Mezereum. *Linn. Sp. Pl.* 509. *Sm. Fl. Brit.* 420. *Huds.* 167. *With.* 376. *Hull.* 85. *Woodv. Med. Bot. t.* 23. *Meyrick Misc. Bot. t.* 1.

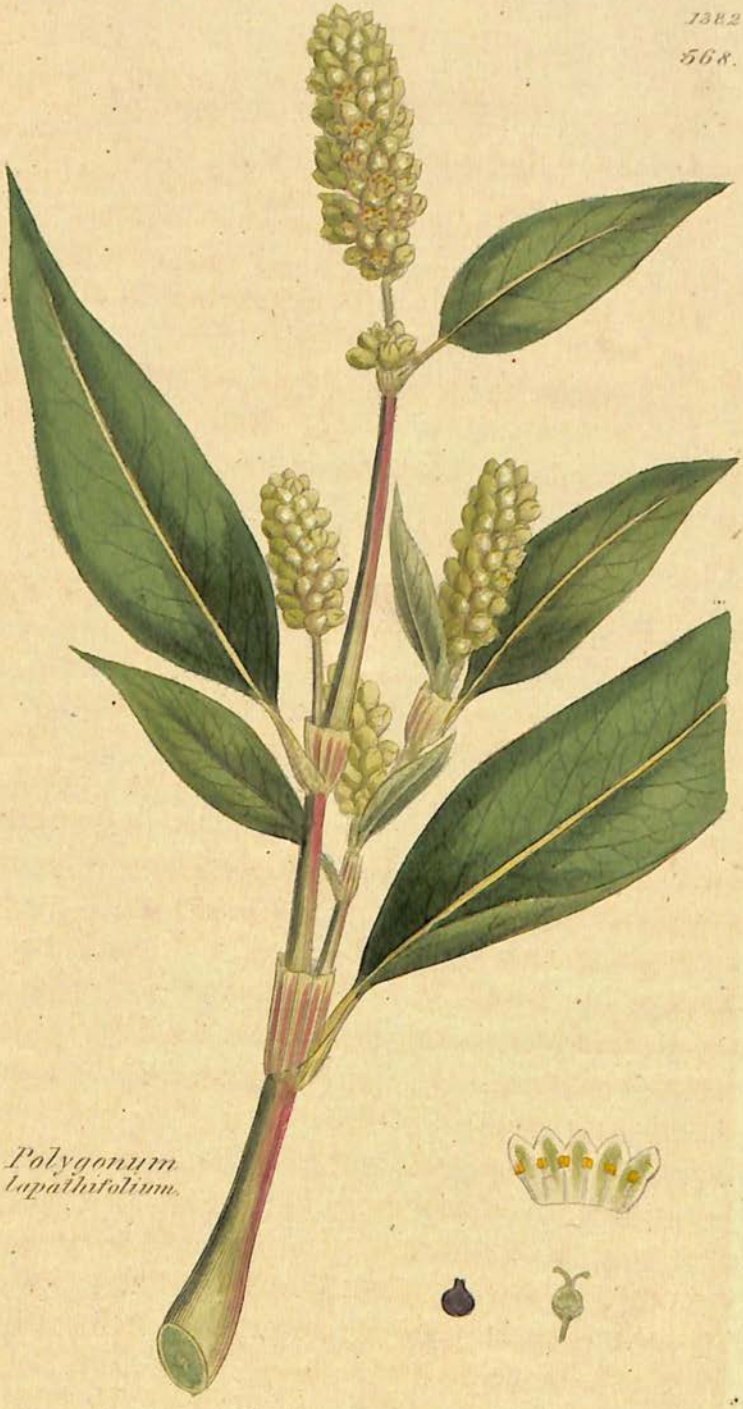
MILLER assures us in his Dictionary that this favourite shrub, so common in plantations, had been in his time discovered wild in woods near Andover, Hampshire, and that the gardens had been plentifully supplied from thence. It is said on good authority to grow also in Suffolk and Staffordshire. The flowers expand in March or earlier, before the leaves, and are remarkable for their beauty and powerful fragrance. The scarlet berries ripen in July, if the birds, which is rarely the case, suffer them to remain so long.

This shrub is commonly 4 or 5 feet high, much branched, tough and pliant, smooth in every part except the tube of the calyx. Leaves lanceolate, entire, deciduous. Flowers sessile in lateral scattered clusters, of a fine rose-colour, (sometimes white,) their calyx being of the nature of a corolla in texture and colour; and indeed botanists dispute about its proper denomination. Stamina short, fixed in the tube in two rows. Berry with one large seed.

Every part of the plant is extremely acrid; but the bark of the root is given in decoction, where great debility or insensibility of the stomach or throat requires so violent a stimulus.

1382

568.



Polygonum
lapathifolium.

Nov.1 1804. Published by J.E. Sowerby.

POLYGONUM lapathifolium.

Pale-flowered Persicaria.

OCTANDRIA Trigynia.

GEN. CHAR. *Cal.* coloured, in 5 segments, permanent. *Seed* solitary, superior, angular, invested with the calyx. *Stam.* and *Pist.* uncertain in number.

SPEC. CHAR. Flowers with six stamina and two distinct styles. Flower-stalks rough. Stipulæ beardless. Seeds concave on each side.

SYN. Polygonum lapathifolium. *Linn. Sp. Pl.* 517. *Sm. Fl. Brit.* 425. *Relh.* 156. *Sibth.* 129. *Abbot.* 89.

P. pensylvanicum. *Curt. Lond. fasc.* 1. *t.* 24, 25.

P. Persicaria ζ. *Huds.* 170.

P. pallidum. *With.* 381. *Hull.* 85.

Persicaria mitis major, foliis pallidioribus. *Raii Syn.* 145.

OF this there are several varieties; some with pale whitish flowers, as in our figure; others with red flowers and stem, or a spotted stem; some whose leaves are smooth, others hoary, on the under side. All of them are annual, flowering in July and August, and occurring about dunghills and in rich moist ground, especially in the low tracts about the Thames. Mr. Curtis, as we have observed at *v.* 11. *p.* 756, was the first who clearly distinguished this species from the more universal *P. Persicaria.* He erred only, with Hudson, in supposing ours the *P. pensylvanicum,* which proves by the Linnæan Herbarium to be different. In that collection indeed is no authentic specimen of *P. lapathifolium*; so that its name rests on the authority of descriptions and synonyms only: but we believe it is not liable to be controverted. The specific character depends on the separate styles, glandular stalks, and mostly beardless stipulæ.

688.

Prunus Padus.

Published by Jas Sowerby London

PRUNUS Padus.

Bird Cherry.

ICOSANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Pet.* 5. *Stone* of the *drupa* with slightly prominent seams.

SPEC. CHAR. Flowers in long pendulous clusters. Leaves deciduous, with two glands on the under side at the base.

SYN. Prunus Padus. *Linn. Sp. Pl.* 677. *Sm. Fl. Brit.* 526. *Huds.* 213. *With.* 455. *Hull.* 108. *Dicks. H. Sicc. fasc.* 18. 15.

Cerasus Avium nigra et racemosa. *Raii Syn.* 463.

THE Bird Cherry forms a small tree, very ornamental in May when covered with its light snowy blossoms, for the sake of which it is sometimes allowed a place in gardens or shrubberies. The small black bitter fruit ripens in June or July, and is soon devoured by birds. The plant is common in the north of England; less so in the south. Mr. Woods gathered our specimen of the fruit at Temple Mills, Essex.

A singularity is observable in the stone of the *drupa*, which is rugged, answering to the character of *Amygdalus;* not smooth as it ought to be in *Prunus*. This confirms the assertion of Gærtner, that no solid character exists between these two *genera*.

The branches of the Bird Cherry are round and smooth. Leaves obovate, pointed, serrated, smooth, veiny, a little glaucous, with 2 glands at the base. Their smell is unpleasant, somewhat like rue; and they, no doubt, possess the poisonous qualities of their *genus* in an eminent degree. The stipulæ are linear, serrated, and soon fall off. Petals serrated.

736.

Potentilla alba.

Nov. 1 1804. Published by J.d Sowerby, London.

POTENTILLA alba.

White Cinquefoil.

ICOSANDRIA Polygynia.

GEN. CHAR. *Cal.* in 10 segments. *Petals* 5. *Seeds* roundish, naked, generally wrinkled, affixed to a small dry receptacle.

SPEC. CHAR. Leaves in fives; silky underneath; tipped with conniving serratures. Stems thread-shaped, procumbent. Receptacle very hairy.

SYN. Potentilla alba. *Linn. Sp. Pl.* 713. *Sm. Fl. Brit.* 551. *Huds.* 224. *With.* 474. *Hull.* 112.

Quinquefolium sylvaticum majus flore albo. *Ger. em.* 989.

HUDSON relates that this elegant alpine plant has been found in Wales by a Mr. Haviland. On this authority alone its place in the *Flora Britannica* depends, nor could we ever obtain any other than a garden specimen. It flowers early in the summer, continuing for some time.

The root is black, fibrous, and perennial. Stems procumbent, filiform, branched, hairy. The radical leaves stand on long hairy footstalks, and each consists of three large and 2 small elliptical leaflets, entire except at their points, where a few close serratures are discernible. The upper surface is green and smooth; the under white and silky. The stem-leaves are ternate only, with a short stalk. A pair of oblong stipulæ is attached to the base of each footstalk. The flower-stalks are few, long, slender, and single-flowered. Segments of the calyx pointed and silky. Petals pure white, notched. Seeds intermixed with long dense bristles.

This *Potentilla* is easily cultivated, and deserves a place on artificial rock-work, or dry borders.

906.

THLASPI campestre.

Common Mithridate Mustard.

TETRADYNAMIA Siliculosa.

GEN. CHAR. *Pouch* notched, inversely heart-shaped, with several seeds: valves boat-like, their keels forming the border: partition contrary to the valves.

SPEC. CHAR. Pouch roundish, sprinkled with glandular dots, bordered at the upper part. Leaves arrow-shaped, toothed, hoary.

SYN. Thlaspi campestre. *Linn. Sp. Pl.* 902. *Sm. Fl. Brit.* 684. *Huds.* 281. *With.* 569. *Hull.* 145. *Sibth.* 199. *Curt. Lond. fasc.* 5. *t.* 45.

T. vulgatius. *Raii Syn.* 305.

THIS is not an uncommon plant in cultivated ground, though not mentioned in the Cambridge or Bedford Floras. It flowers in July and August.

The root is annual, and tapering. Whole herb clothed more or less with short hoary pubescence. Stem about a foot high, branched above, round and leafy. Lower leaves obovate; upper arrow-shaped, acute, clasping the stem; all generally toothed, sometimes entire. Flowers small, white, in small *corymbi* soon lengthened out into very long spikes. Petals spatulate, undivided, scarcely longer than the calyx. Pouch roundish, protuberant, its border much dilated at the upper edge, and notched where the style is inserted. Seed 1 in each cell. The sides of the pouch are clothed with small glandular depressions, like little shining scales, by which this species appears to us clearly distinguished from the true *T. hirtum*, a plant we have received from Scotland since the second vol. of *Fl. Brit.* was published. These scales are much more certain than the want of hairs; for the pouch of *T. arvense* is sometimes hairy, and then it becomes the *hirtum* of Hudson, as we know by a specimen of his own. There is a variety with smooth leaves.

1260.

Carex acuta.

CAREX curta.

White Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 scale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 scale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a swelling tunic.

SPEC. CHAR. Spikelets about six, elliptical, rather distant, naked. Glumes ovate, membranous, slightly pointed. Tunic undivided.

SYN. Carex curta. *Gooden. Tr. of L. Soc. v.* 2. 145. *Sm. Fl. Brit.* 967. *With.* 88. *Hull.* 204. *Relh.* 363. *Schkuhr. Caric.* 43. *n.* 33. *t.* C. *f.* 13.

C. brizoides. *Huds.* 406.

C. canescens. *Lightf.* 550.

Gramen cyperoides palustre elegans, spicâ compositâ asperiore. *Raii Syn.* 423.

G. cyperoides elegans, spicâ compositâ molli. *Dill. in Raii Syn.* 423.

WE have received this Carex, generally supposed very rare, from Yorkshire, Cambridgeshire, Suffolk, Sussex and Scotland. It grows in watery places, flowering in June, but is not readily discernible from other kinds till its neat whitish or silvery spikelets are fully formed and begin to ripen.

The root is perennial, and in some degree creeping. Stem a foot high, triangular, smooth except in the upper part. Leaves linear, narrow, flattish upwards, pale grass-green or somewhat glaucous, roughish, rising nearly as high as the stem. Spikelets from 4 to 6 or more, alternate, elliptical, obtuse, many-flowered, the lowest only being occasionally furnished with a bractea, for they are generally all naked. Lower flowers male, fewer than the female. Glumes ovate, shining, with a little green rib. Fruit longer than the glumes, ovate, compressed, smooth, acute, undivided. Stigmas 2. Seed elliptical.

The herbarium of Linnæus first taught us to distinguish this from his *C. brizoides*, which is an exotic species.

CAREX lævigata.

Smooth-stalked Beaked Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 scale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 scale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a swelling tunic.

SPEC. CHAR. Spikes cylindrical: the female ones on stalks. Sheaths very long. Glumes pointed. Fruit triangular, with a cloven beak.

SYN. Carex lævigata. *Sm. Tr. of Linn. Soc. v. 5. 272. Fl. Brit.* 1005.

C. æthiopica. *Schkuhr. Caric.* 107. *n.* 91. *t.* Z. *f.* 83.

OUR specimens were gathered July 3d by Mr. E. Forster in a boggy thicket near Warley Common, Essex. The same gentleman has found this species in Cornwall and Sussex. It was first observed in Scotland; see *Fl. Brit.*; but has been overlooked by most botanists. Schkuhr had it from the isle de Bourbon, and therefore named it, not happily, *æthiopica;* but the figure in his excellent work cannot be mistaken.

This may have been considered as *Carex vesicaria* not fully grown. It is distinguishable by the long stalks of its female spikes, (which spikes also are longer and more slender than in *vesicaria,*) and especially by the tunic of the seed not becoming inflated at any period of its growth. The remarkable smoothness of its whole stem and principal leaves, the upper floral leaves only being rough at the edges, and the lower ones merely at the tip, is a ready and permanent difference between this plant and all with which it can be confounded. The spikes become rusty, not black, by age. Their glumes have rough points. The males are 1 or 2; females 2, 3 or 4. Sometimes a starved spike of hermaphrodite flowers has been observed by Mr. J. Sowerby.

1338

1330.

Salix purpurea.

Dec.ª 1. 1804. Published by Jas. Sowerby, London.

SALIX purpurea.

Bitter Purple Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Decumbent. Stamen one. Leaves obovato-lanceolate, serrated, smooth. *Stigmas* very short, ovate, nearly sessile.

SYN. Salix purpurea. *Linn. Sp. Pl.* 1444. *Sm. Fl. Brit.* 1039. *Tr. of Linn. Soc. v.* 6. 113. *Huds.* 427.
S. monandra. *Arduin. Mem.* 1. 67. *t.* 11. *Ehrh. Arb.* 58.

WE have formerly gathered this Willow in the meadows opposite King Street, Norwich; but it is now scarcely to be found there, nor does it often occur in other places. At least few of our British botanists appear to have seen it, else they could hardly have so readily followed Hoffmann in considering it one species with *S. Helix*, *t.* 1343. It agrees indeed with that in having a simple stamen and 4-lobed anthera, but differs in its spreading decumbent habit, never growing up into a tree; the rich purple of its branches, and the somewhat deeper hue of its leaves. More especially is it distinguished, as Mr. Crowe first remarked, by having much more small and slender catkins, a more elliptical germen, and small, ovate, obtuse, nearly sessile stigmas. It flowers in March. The leaves are very often opposite. The floral scales are small, obtuse, and black. The bark has a very bitter taste, as in *S. Helix*, to which this species bears much the same kind of affinity as *S. Lambertiana*, *t.* 1359, does to *S. Forbiana*, *t.* 1344.

1389

Salix vitellina.

SALIX vitellina.

Yellow Willow, or Golden Osier.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves lanceolate, acute, with cartilaginous serratures; smooth above. Stipulæ small and deciduous; smooth on their inside. Stigmas notched.

SYN. Salix vitellina. *Linn. Sp. Pl.* 1442. *Sm. Fl. Brit.* 1050. *Huds.* 426. *With.* 47. *Hull.* 218. *Sibth.* 16. *Hoffm. Sal. v.* 1. 57. *t.* 11, 12. *t.* 24. *f.* 1. *Ehrh. Arb.* 78.

S. folio longo subluteo, non auriculata, viminibus luteis; eademque viminibus rubris. *Raii Syn.* 450.

NOT unfrequent in osier-grounds; but we had scarcely seen native specimens till Mr. Crowe observed it abundantly in rough low pastures at Ovington near Watton, Norfolk, unquestionably wild. Of late it has become fashionable for planting in low situations, being a handsome tree of a moderate height, conspicuous for its gracefully pendent golden twigs; the tips of which however are often killed by severe cold, and look shabby in the spring, like the exotic Weeping Willow.

The leaves are lanceolate, narrow, long-pointed, silky when young; their serratures glandular, small and uniform. Stipulæ small, serrated, deciduous, mostly altogether wanting; their upper side smooth. The catkins come out in April or May, and are yellow, acute, with wrinkled hairy scales. Stamina 2, very rarely 3. Nectary of 2 or 3 notched scales. Germen lanceolate, sessile. Stigmas notched. The above description may serve to correct the *Fl. Brit.* and Hoffmann, especially concerning the stipulæ.

Haller very erroneously supposed this not distinct from *S. alba.*

1390

1376.

Salix Dicksoniana.

Dec. 1. 1800. Published by J. Sowerby, London.

SALIX Dicksoniana.

Broad-leaved Mountain Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves elliptical, acute, slightly toothed, smooth. Young branches very smooth. Catkins ovate, short, erect. Germen silky.

SYN. Salix myrtilloides. *Sm. Fl. Brit.* 1056, but not of Linnæus nor Villars.

HAVING only seen the leaves of this Willow when the *Fl. Brit.* was written, I referred it, though not without some scruples, to the *S. myrtilloides* of Linnæus. Its catkins however, produced last spring, clearly prove it to be a new species, to which we now give the name of that very eminent botanist who first found it on the Scottish mountains, and from whose growing specimens, cultivated by Mr. Crowe, our figure and description are taken.

This is a small upright branched shrub, about a foot high, flowering in April, quite smooth in all its branches, leaves and stalks. Stipulæ very minute, like those of *S. carinata*. Leaves on short thickish footstalks, flat, elliptical, acute, with obsolete glandular teeth or serratures; the upper surface very even, and bright green; the under glaucous, finely veined. Female catkins ovate, very short, being like those of *S. rosmarinifolia* in shape, but erect. Scales dark purplish brown, concave, notched, hairy. Germen stalked, ovate, silky, with a short style, and thick yellow notched stigmas.—The germens of the true *myrtilloides* are quite smooth, the catkins cylindrical and lax, and the leaves perfectly entire. Of this we have seen no British specimens.

Dec.r 1. 1804. Published by Jas. Sowerby, London.

DICRANUM Scottianum.

Curve-stalked Fork-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* oblong. *Fringe* of 16 flat, cloven teeth, a little inflexed.

SPEC. CHAR. Stem branched, fastigiate. Leaves awl-shaped, entire, slightly incurved by drying. Capsule elliptical. Fruit-stalk curved.

SYN. Dicranum Scottianum. *Sm. Fl. Brit.* 1226. *Turn. Musc. Hibern.* 75. *t.* 6. *f.* 1.

DOCTOR SCOTT first discovered this new moss on stones near Swanlinbar in Ireland, and sent it to Mr. Turner. Mr. W. Borrer junior has found it plentifully in Sussex, producing its capsules (which indeed but rarely occur) in September. To the gentleman last mentioned we are indebted for fine specimens.

The present species has much affinity to *D. polyphyllum*, *t.* 1217, agreeing with that in general habit and colour, turning black with age. The leaves however are narrower, quite entire, and merely incurved in a slight degree, not curled or twisted, by drying. A central rib runs from their base to the tip, as in that species. The fruit-stalks are longer, tawny, curved. Capsule cylindrical, moderately swelling in the middle, straight, obscurely furrowed when ripe. Lid awl-shaped, slender, oblique, red at the base, equal in length to the capsule. Fringe red.

1392

2282

Scyphophorus alaicornis.

Dec.r 1. 1804. Published by Jas. Sowerby, London.

LICHEN alcicornis.

Elk's-horn Cup Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Obscurely cup-shaped, green, cartilaginous, at length branched, all over leafy. Lower leaves erect, dilated, lobed. Tubercles numerous, terminal, minute, brown.

SYN. Lichen alcicornis. *Achar. Prod.* 184. *Lightf.* 872. *Relh.* 468. *Abbot.* 269.
L. foliaceus. *With. v.* 4. 35. *Hull.* 302.
L. pyxidatus β. *Huds.* 552.
Bæomyces alcicornis. *Achar. Meth.* 349.
Coralloides scyphiforme, foliis alcicorniformibus cartilaginosis. *Dill. Musc.* 87. *t.* 14. *f.* 12.

FOUND frequently on mountainous barren heathy dry places, being in the greatest perfection in the moist weather of the winter or early spring. By drought it becomes dry, with its leaves curled inward, and its whole substance very brittle.

The stems form tufts, and are at first more or less cup-shaped, but they soon become branched or proliferous, and are clothed with leaves, at least till stripped by time. The leaves are flat, cartilaginous, variously lobed and cut, sometimes pinnatifid; green above, white beneath: the radical ones upright. Indeed the young plants at first are mere leaves, bearing small cups with tubercles all over their upper surface; but the perfect state is as above described, in which the imperfectly formed cups branch out into short stalks tipped with small round dark-brown tubercles, accompanied by small leaves.

Scyphophorus pyxidatus.

Dec.ʳ 1.1804, Published by Jas Sowerby, London.

LICHEN pyxidatus.

Common Cup Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

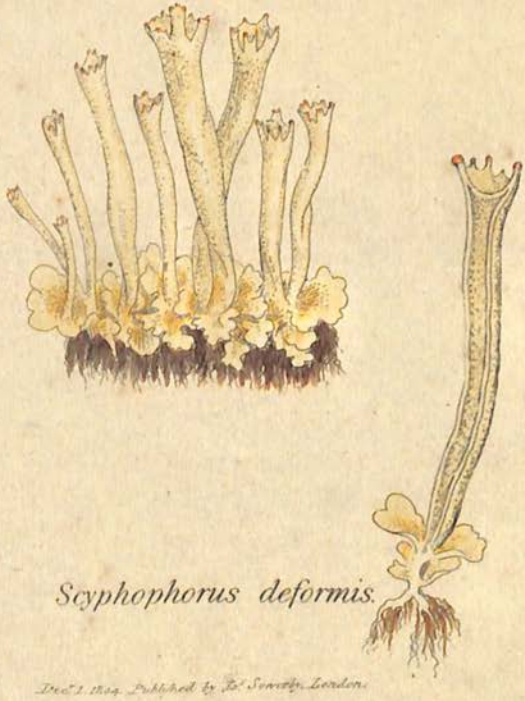
SPEC. CHAR. Cup-shaped, leathery, greyish-green, scaly, often proliferous. Cups dilated, nearly entire. Tubercles brown. Leaves minutes, imbricated, crenate.

SYN. Lichen pyxidatus. *Linn. Sp. Pl.* 1619. *Achar. Prod.* 186. *Huds.* 551. α—γ. *With.* v. 4. 36. *Hull.* 303. *Relh.* 469. *Sibth.* 332. *Abbot.* 268, *n.* 900 and 901.
Lichenoides tubulosum pyxidatum cinereum. *Raii Syn.* 68.
Bæomyces pyxidatus. *Achar. Meth.* 337.
Coralloides scyphiforme, tuberculis fuscis. *Dill. Musc.* 79. *t.* 14. *f.* 6.

THIS most common kind of cup-bearing Lichen is generally called Cup-Moss, under which name it is famous as a cure for the hooping cough. Nothing can be more easily procured in heathy somewhat shady places, where it commonly forms broad hoary perennial patches of minute imbricated lobed leaves, of a greyish green when wet, almost white when dry. Copious thick tubular stems arise from among the leaves, various in height, each dilated at the summit into a pretty regular and entire cup, all of the same colour, whose margin in due time bears numerous brown tubercles on short stalks. Very often these marginal stalks become as long and thick as the parent stem, and bear tubercles in proportion; more rarely they bear other cups, whose edges are again and again proliferous: still more unfrequently it happens that the centres of all the cups are repeatedly proliferous.

1394

2292.



Scyphophorus deformis.

Dec.r 1. 1804. Published by Jas. Sowerby, London.

LICHEN deformis.

Clumsy Indented Cup Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Leathery, pale yellowish grey. Stems tubular, thick, mostly simple. Cups small, irregular, sharply toothed. Tubercles scarlet, minute. Leaves roundly lobed.

SYN. Lichen deformis. *Linn. Sp. Pl.* 1620. *Fl. Lapp. n.* 433. *t.* 11. *f.* 5. *Achar. Prod.* 189. *With. v.* 4. 38. *Hull.* 303. *Lightf.* 876. *Relh.* 470.
L. pyxidatus β. *Huds.* 554.
Lichenoides tubulosum minùs ramosum, cauliculis crassioribus difformibus. *Raii Syn.* 68.
Bæomyces deformis. *Achar. Meth.* 334.
Coralloides crassius subincanum, calicibus dentatis. *Dill. Musc.* 95. *t.* 15. *f.* 18.

LIGHTFOOT, like many other botanists, thought this among the doubtful species of the Cup Lichens, and most probably a variety of *L. cocciferus*, commonly called Scarlet Cup Moss. We think it as likely to be distinct as any of its tribe; and being one of the rarest kinds, we hope it will not be thought superfluous in our work. Very few coloured figures of any of this difficult tribe having been published, it is surely desirable to have them perpetuated somewhere. Theorists may dispute for ever which of them are species and which varieties, for we know of no experimental mode of deciding the question.

L. deformis is found in shady dry woods. Its general colour is more inclined to yellow than that of the preceding. The leaves are all radical, dilated, roundly lobed. Stems almost always simple, tubular, thick, inflated or wrinkled, smoothish, each terminating in a small shallow cup, very irregularly but sharply toothed at the edge, each tooth bearing a little bright scarlet tubercle.

1395
2348.

Delesseria
ruscifolia

FUCUS ruscifolius.

Blunt Tongue-bearing Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in clustered tubercles, which burst at their summits.

SPEC. CHAR. Stem branched, winged. Leaves oblong-oval, obtuse, flat, entire, proliferous; with pellucid chain-like veins. Tubercles globose, sessile.

SYN. Fucus ruscifolius. *Turner Tr. of Linn. Soc. v.* 6. 127. *t.* 8. *f.* 1. *Syn.* 11.

FOR the knowledge of this elegant Sea-weed, as well as for specimens, we are entirely obliged to Mr. Turner, who first described it in the Linnean Society's Transactions, and afterwards in his excellent *Synopsis*. At first it was taken for a variety of the species in our next plate, but is accurately and curiously distinguished by the structure of its veins, which, when the leaf is held against the light, appear jointed, or like little chains running parallel to each other. The leaves are also more blunt, and the colour darker than in *F. Hypoglossum*.

Several fronds or stems, 2 or 3 inches high, spring from one callous root. Each branch is winged from top to bottom, forming an oblong, blunt, somewhat elliptical, entire leaf, with a midrib, from which grow several alternate smaller leaves of the same form (like the genus *Ruscus*), and these again often produce from their midribs still smaller leaves. The seeds, according to Mr. Turner, are found in January or February, either constituting round tubercles on the midrib, or arranged in 2 rows parallel to it.—We should rather refer this Fucus and the following to the section of *alati* than to that of *foliis distinctis*.

1396

2.3.17.

Delesseria Hypoglossum

Dec.1. 1804. Published by J.E. Sowerby London.

FUCUS Hypoglossum.

Sharp Tongue-bearing Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in clustered tubercles, which burst at their summits.

SPEC. CHAR. Stem branched, winged. Leaves linear-lanceolate, acute, flat, entire, proliferous, minutely reticulated. Tubercles globose, sessile.

SYN. Fucus Hypoglossum. *Woodward Tr. of Linn. Soc. v. 2. 30: t. 7.* and *v. 3. 118. Turn. Syn. 17. With. v. 4. 95. Hull. 316.*

THIS seems to be not so rare as the foregoing, though by no means common. Mr. Crowe found it growing on the rocks at Cromer, from whence probably it is occasionally washed towards the Yarmouth beach. It has also been found on the south and west coasts of Britain. It bears fruit in July and August, not in the winter; which affords Mr. Turner another argument for separating it from his *F. ruscifolius*.

With that species it accords in general habit, size, and fructification; but is of a brighter more beautiful rose-colour, and the leaves are always sharp-pointed. Their structure is uniformly and very minutely reticulated, without those jointed veins which characterize the former.

If we may offer a conjecture respecting the two different positions in which the seeds are found, often on the same frond, we should guess that they may be emitted laterally from the ripe tubercle into the substance of the leaf on each side of the midrib; after which the mere extension of the leaf in growing will account for their being drawn out into two lines. So they must remain till the plant decays, and disperses them in the water.

Scandix Pecten Veneris

SCANDIX Pecten-Veneris.

Needle Chervil.

PENTANDRIA Digynia.

GEN. CHAR. *Gen. involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-shaped. *Central flowers* often male.

SPEC. CHAR. Seeds roughish, with very long beaks. Leaflets cut into many linear segments.

SYN. Scandix Pecten-Veneris. *Linn. Sp. Pl.* 368. *Sm. Fl. Brit.* 324. *Huds.* 123. *With.* 307. *Hull.* 63. *Relh.* 118. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. fasc. 5. t.* 21. *Mart. Rust. t.* 38. *Dicks. H. Sicc. fasc.* 15. 4.

S. semine rostrato vulgaris. *Raii Syn.* 207.

THREE British species of *Scandix* have been described in this work already. The only remaining one, as far as has been yet observed, is the most common of all in cultivated ground, and is known by the name of Venus's Comb, or Shepherd's Needle, in allusion to the remarkably long beaks of the seeds, resembling needles, or the teeth of a comb. It begins flowering in June and lasts till September, being not very conspicuous till the seeds are fully grown.

Root annual. Stems branched, spreading, leafy, furrowed and rough, various in height and luxuriance. Leaves light green, alternate, triply pinnatifid, their segments linear, acute, smoothish; their common footstalks dilated and clasping the stem. Umbels of 2 or 3 long rays; the partial ones of several short rays. Partial involucrum of many membranous leaves, variously jagged, and rough-edged. Flowers small and white. Seeds rough, as well as their long angular beaks. The petals can scarcely be called notched, but are curled in, which gives them that appearance, though less than in many other umbelliferous flowers.

Silene Armeria.

Dec.1 1804. Published by Jas Sowerby London.

SILENE Armeria.

Common or Lobel's Catchfly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling, of one leaf. *Petals* 5, with claws. *Caps.* superior, imperfectly 3-celled, bursting at the summit. *Seeds* many.

SPEC. CHAR. Panicles forked, clustered, many-flowered. Petals notched, crowned with sharp teeth. Upper leaves heart-shaped, smooth.

SYN. Silene Armeria. *Linn. Sp. Pl.* 601. *Sm. Fl. Brit.* 471. *Huds.* 189. *With.* 415. *Hull.* 98. *Fl. Dan. t.* 559.

Lychnis viscosa purpurea latifolia lævis. *Dill. in Raii Syn.* 341.

Muscipula Lobelii. *Ger. em.* 601.

THE pretensions of this plant to a place in a British Flora seem to us very slight. Dr. Richardson informed Dillenius that it grew on the banks of the river half a mile below Chester, but no one has confirmed his account, nor strengthened it by finding the plant any where else in Britain. We never saw a British specimen, but have chosen a self-sown garden one, which seems to exhibit the natural appearance of the species. It is annual, flowering all July and August, and is commonly cultivated in gardens for ornament, being very easily propagated by seed.

Root small. Herb destitute of pubescence. Stem 6 to 18 inches high, round, branched, leafy, marked with a brown viscid ring under the upper joints, by which flies are caught, for what particular purpose has scarcely been guessed. Leaves opposite, sessile, entire, glaucous, very smooth, ovate or heart-shaped. Flowers erect, red, inodorous, in a flat-topped, forked, dense tuft, accompanied by small bracteæ. Calyx tubular, smooth, coloured, membranous, with 10 ribs and as many teeth. Petals with long claws, an obcordate limb, and 2 erect sharp teeth. Capsule elliptical, placed on a long footstalk. Seeds many.

EUPHORBIA Esula.

Leafy-branched Spurge.

DODECANDRIA Trigynia.

GEN. CHAR. *Cal.* of 1 leaf, inflated, inferior. *Nectaries* 4 or 5, standing on the calyx. *Caps.* stalked, 3-lobed.

SPEC. CHAR. Umbel of many dichotomous rays. Partial involucra somewhat heart-shaped. Nectaries two-horned. All the leaves uniform.

SYN. Euphorbia Esula. *Linn. Sp. Pl.* 660. *Lightf.* 1135. *Sm. Fl. Brit.* 518.
Tithymalus pineus. *Ger. em.* 499.

MR. LIGHTFOOT did not think himself authorized to admit this plant into his *Flora*, as he had not seen specimens. He therefore merely mentions the report of its being a native, in doing which he falls into a small error respecting the precise place of its growth, which is in a wood near a rivulet at Abercorn, thirteen miles west of Edinburgh, from which the late Mr. J. Mackay sent us wild specimens. That in our plate came from Mr. W. Borrer's garden, the root having been found at Slinfold, Sussex. As this species is never cultivated in gardens for ornament or use, we see no reason to doubt its being wild in our island. Mr. Benjamin Charlesworth appears to have first discovered it.

The root is woody, creeping and perennial. Stems a foot high or more, erect, smooth like all the rest of the herb. Lateral branches numerous, leafy, chiefly without flowers except the uppermost, in which respects it agrees with *E. Cyparissias*, *t.* 840, but differs in having all the leaves of an uniform size, and of a narrow obovate form. The flowers appear early in July, in an umbel of many rays, with heart-shaped involucra. Their nectaries are of a tawny brown, with 2 horns. Capsule without warts or hairs.

Geum urbanum

April 1st 1805, Published by Jas. Sowerby, London.

GEUM urbanum.

Common Avens.

ICOSANDRIA Polygynia.

GEN. CHAR. *Cal.* in 10 segments. *Pet.* 5. *Seeds* with a jointed awn. *Receptacle* columnar.

SPEC. CHAR. Leaves ternate. Stipulæ rounded and cut. Flowers erect. Awns of the seeds hooked, naked.

SYN. Geum urbanum. *Linn. Sp. Pl.* 716. *Sm. Fl. Brit.* 554. *Huds.* 226. *With.* 477. *Hull.* 113. *Relh.* 199. *Sibth.* 162. *Abbot.* 114. *Curt. Lond. fasc.* 2. *t.* 36. *Woodv. Suppl. t.* 259.

Caryophyllata. *Raii Syn.* 253.

FREQUENT in woods and about shady dry hedges, flowering from May to August.

The root is perennial, fibrous, blackish, astringent and slightly aromatic. Its qualities would be well worth attention, had we not more powerful exotic medicines of a similar kind. Stem upright, 2 feet high, round, panicled, leafy, clothed with small deflexed hairs. Leaves ternate, hairy, lobed and cut, the leaflets extremely unequal; for in the radical leaves, which have long stalks, the lateral leaflets are so minute as to be scarcely observable; in the upper ones, which have no stalks, they become more properly stipulæ. Flowers terminal, solitary, erect, yellow, varying occasionally in size (see *Raii Syn.*), but the petals are generally shorter than the calyx. Seeds a little hairy, but the awns are naked, of a brown or purplish colour, each tipped with a hook which hangs to the coats of animals.

Clinopodium vulgare

Published by Longman & Co. London

CLINOPODIUM vulgare.

Wild Basil.

DIDYNAMIA Gymnospermia.

GEN. CHAR. *Cal.* 2-lipped. *Involucrum* of many taper leaves placed under the whorl.

SPEC. CHAR. Whorls hairy. Floral leaves bristle-shaped. Flower-stalks branched. Leaves slightly serrated.

SYN. Clinopodium vulgare. *Linn. Sp. Pl.* 821. *Sm. Fl. Brit.* 638. *Huds.* 261. *With.* 535. *Hull.* 135. *Relh.* 236. *Sibth.* 188. *Abbot.* 132.

C. origano simile. *Raii Syn.* 239.

NOT uncommon in bushy places by road sides where the soil is calcareous or gravelly, blossoming from July to the end of autumn. Our specimen was gathered in a lane at Saham, Norfolk, in September last.

Root perennial, fibrous or somewhat creeping. Stems wavy, but not regularly zigzag, hairy, with four bluntish angles. Leaves on stalks, ovate, rather obtuse, slightly serrated, hairy, especially at the back of the veins, where the hairs form a regular fringe. Whorls terminal and axillary, not many, but composed of numerous red flowers, which stand on branched hairy stalks. These bear, at the foot of the little stalks on which the flowers stand, several setaceous hairy leaves, called by Linnæus an *involucrum* in his generic character, and *bracteæ* in his specific one, and to which he was obliged to have recourse (as in the umbelliferous tribe) for forming his generic character; a character natural and certain enough, if not rigidly conformable to his own laws. Like a true philosopher, he *sometimes* sacrificed them to truth, no philosopher ever did so *always*. Calyx ribbed and hairy; its lower teeth longest and most prominent. Corolla twice as long as the calyx, handsome, with 2 hairy knobs at the orifice. The whole herb is aromatic, with a faint thyme-like odour.

55053

1402

1362.

Salix oleifolia.

SALIX oleifolia.

Olive-leaved Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves obovato-lanceolate, flat, minutely indented, acute; underneath glaucous and hairy. Stipulæ small, notched.

SYN. Salix oleifolia. *Sm. Fl. Brit.* 1065.

OUR first knowledge of this Willow was derived from plants sent by Mr. Dickson; but it proves to be not uncommon in hedges and coppices in various parts of Norfolk, and is most unquestionably a well-defined species. It produces catkins in March, being one of the earliest of our native Willows; and those catkins are larger than in any other wild species, except *S. caprea* with which they nearly accord. The leaves however are totally different from those of *caprea*.

S. oleifolia rises from 4 to 8 or 10 feet in height, with straight, slender, divaricating branches, clothed with very fine short down. Leaves a little spreading, straight and somewhat rigid, tapering from the middle to the base, broader upward, acute but not pointed, slightly serrated, or oftener toothed, throughout; green, flat, and finely downy above; glaucous, with numerous, prominent, hairy, reticulated veins, beneath, where they generally assume more or less of a rusty hue. Footstalks of a moderate length, downy. Stipulæ varying in size, but never large; roundish, sometimes cloven and notched, and when not very small they are reflexed or vaulted. Flower-buds very large, downy, brown. Male catkins shortish, very thick, with an obovate, brown, hairy scale, a blunt nectary, and 2 distinct, long, conspicuous, golden stamina, to each flower. The female we have not examined.

Salix cotinifolia.

SALIX cotinifolia.

Quince-leaved Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves elliptical, almost circular, slightly toothed; downy, and marked with rectangular veins beneath. Stigmas cloven.

SYN. Salix cotinifolia. *Sm. Fl. Brit.* 1066.

SENT by Mr. Dickson from the north; but Mr. Crowe has found it in Norfolk of a larger growth, being 6 or 8 feet high. It flowers in April, and is very remarkable for its round leaves, much resembling those of a Quince tree.

The branches are spreading, clothed with fine but not thick-set down. Leaves spreading, thick and firm, on thick hairy stalks, of a very broad elliptical figure, often truly orbicular, with a little point, flat, slightly though regularly toothed; above of a dull green, clothed with little flat scattered hairs; beneath pale or glaucous, downy or hairy, their principal veins spreading at right angles from the mid-rib, nearly parallel to each other, their branches reticulated, all pale, not rusty. Stipulæ small, rounded. Female catkins, the only kind we have seen, about half an inch long when in blossom, ovate, with blunt, short, black, hairy scales. Nectary short, obtuse. Germen on a short stalk, lanceolate or somewhat ovate, downy, with a considerable style, and a pair of spreading cloven obtuse stigmas. Capsules lanceolate, downy.

In drying, the leaves are very apt to turn black; which is not the case with the preceding.

1404

1367.

Salix hirta

Published by J. Sowerby, London

SALIX hirta.

Hairy-branched Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves elliptic-heartshaped, pointed, finely notched, downy on both sides. Stipulæ half heart-shaped, flat, toothed, nearly smooth. Branches hairy.

MR. CROWE has discovered this Willow in Norfolk some time since, but, as is the case with some others, we were not sufficiently acquainted with its distinctive marks to admit it into the *Flora Britannica*. On further examination however it appears to be distinct. It flowers in April or early in May, and is most allied to the species described in our two last pages, but the following marks will serve to discriminate it.

In height it is a small tree. The branches are thick, and most remarkably hairy with very close prominent horizontal hairs. Leaves 2 inches long, of a broad elliptical figure, heart-shaped at their base, and ending in a sharp point; their edges furnished with shallow notches rather than teeth or serratures; their upper side dullish green; the under pale or glaucous, finely veined; both clothed with fine short pubescence. Footstalks longish, very hairy. Stipulæ nearly smooth, flat, half heart-shaped, acute, minutely toothed. Male catkins cylindrical, rather slender. Scales somewhat acute, brown, hairy. Nectary blunt and papillary. Stamina yellow, long.

The leaves in drying are still more inclined to turn black than those of the last.

1405

1785.

Sphagnum obtusifolium

Tab. 1285. Published by Pl. Sowerby, London

SPHAGNUM latifolium.

Broad-leaved Bog-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* without a fringe. *Veil* cut round, its base remaining on the base of the capsule. *Antheræ* surrounded with a ring.

SPEC. CHAR. Branches bent downwards, swelling. Leaves ovate, obtuse, concave.

SYN. Sphagnum latifolium. *Hedw. Sp. Musc.* 27. *Sm. Fl. Brit.* 1145. *Turn. Musc. Hibern.* 5.

S. palustre α. *Linn. Sp. Pl.* 1569. *Huds.* 465. *With.* 783. *Hull.* 245. *Relh.* 412. *Sibth.* 273. *Abbot.* 228.

S. palustre molle deflexum, squamis cymbiformibus. *Dill. Musc.* 240. *t.* 32. *f.* 1.

S. cauliferum et ramosum palustre molle candicans, reflexis ramulis, foliis latioribus. *Dill. in Raii Syn.* 104.

THIS moss, in large soft elastic spongy tufts, covers the surface of watery turfy bogs, and is rendered conspicuous by its pale whitish-green colour, often tinged with red. The places it covers can seldom be walked upon with safety; and even when the ground is firm beneath, the moss is often filled with water like a sponge. *Droseræ*, *Erica tetralix*, and in some places the Cranberry, grow amongst it.

The fruit is chiefly to be met with in summer, but is not constantly produced. Stems erect, various in height, soft and flexible, leafy, clothed with numerous short swelling taper-pointed branches, situated in pairs, and inclining downward. Some much more slender branches, which accompany them, are closely pressed downward to the stem. Leaves imbricated, ovate, broad, obtuse, curved inward, entire, concave, without rib or veins, regularly reticulated. Fruit-stalks terminal, shortish, surrounded with new branches, swelled at the top. Capsule erect, ovate, short, smooth, cylindrical when dry. Lid almost flat. Veil thin, its circular base more or less permanent. Antheræ, according to Hedwig, surrounded by a very peculiar ring.

Sphagnum acutifolium

Jan.ª 1. 1806. Published by Jas. Sowerby, London.

SPHAGNUM capillifolium.

Slender Bog-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* without a fringe. *Veil* cut round, its base remaining on the base of the capsule. *Antheræ* surrounded with a ring.

SPEC. CHAR. Branches slender, bent downward. Leaves ovato-lanceolate, pointed, flattish, close-pressed.

SYN. Sphagnum capillifolium. *Hedw. Sp. Musc.* 28. *Sm. Fl. Brit.* 1146. *Turn. Musc. Hibern.* 6.

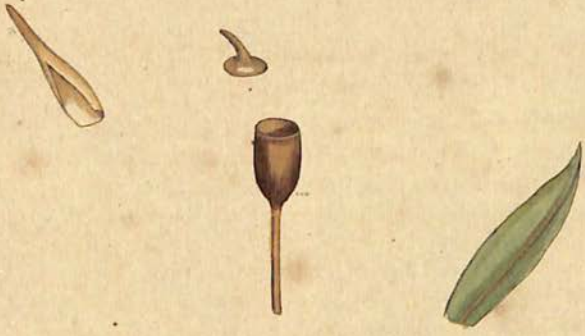
S. palustre β. *Linn. Sp. Pl.* 1569. *Huds.* 465. *With.* 783. *Hull.* 245.

S. palustre molle deflexum, squamis capillaceis. *Dill. Musc.* 243. *t.* 32. *f.* 2. A.

S. cauliferum et ramosum palustre molle candicans, reflexis ramulis, foliis angustioribus. *Dill. in Raii Syn.* 104.

NOT less abundant than the foregoing on bogs in rather mountainous places, and bearing fruit at the same season. It agrees with that in colour, but is more frequently tinged red, especially when in a dwarf state. The branches are much more slender, and generally more pendulous; at least the very slender close-pressed branches are in this species more numerous. The leaves afford a most certain distinction, being smaller, narrower, almost flat, tipped with a sharp point which varies in length. Capsule ovate, its stalk generally longer than in the last.

Mr. J. Sowerby has observed the reticulations of the leaves to be very different from those of the preceding, the little transverse veins running in pairs. A fold or keel like a nerve is frequently perceptible.



Jan.ª 2.1806. Published by Jas. Sowerby, London.

GYMNOSTOMUM obtusum.

Dark Beardless-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* without a fringe. *Lid* deciduous. *Veil* separating entire from the base.

SPEC. CHAR. Leaves ovate-oblong, acute, flat, mostly entire. Capsule obovate, obtuse. Lid awl-shaped.

SYN. Gymnostomum obtusum. *Hedw. Sp. Musc.* 34. *t.* 2. *f.* 1—3. *Sm. Fl. Brit.* 1159. *Turn. Musc. Hibern.* 9. *t.* 1. *f.* g—i.

Bryum obtusum. *Dicks. Crypt. fasc.* 2. 5. *t.* 4. *f.* 7. *With.* 811. *Hull.* 256.

THIS little moss was found by Mr. Dickson, its original observer, on the highland rocks and stones of Scotland. It is not however confined to that country, but, thriving in a barren sandy soil, is extremely common about Yarmouth. We are obliged to Mr. Turner and Mr. Teesdale for specimens. The fruit ripens in June. The root is believed to be annual.

This is not quite so small as the common *G. truncatulum.* It grows like that in large patches, the stems being very short, and generally simple. Leaves oblong, inclining to ovate or elliptical, flat, acute, beardless, generally quite entire; sometimes we have thought them slightly toothed. They have a strong brownish midrib, but are otherwise of a dark dull green, turning pale and brownish by age. Fruit-stalk firm and rather stout for its short height, which is but little more than that of the stem, red, straight. Capsule red-brown, upright, obovate, or rather elliptical with a wide mouth, as if abruptly cut off. Lid very slightly convex, with an awl-shaped, curved, bluntish point, somewhat shorter than the capsule itself. Veil cylindrical, brownish.

One of Mr. Dickson's Scottish specimens has a more taper elongated fruit-stalk, and paler leaves, than ours generally bear.

1408

1732.

Weissia lanceolata.

Jan.ʸ 1.1805. Published by Jas Sowerby, London

GRIMMIA lanceolata.

Lanceolate Bearded Grimmia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* simple, of 16 teeth, broadest at their base. *Flowers* terminal. *Veil* cylindrical.

SPEC. CHAR. Leaves lanceolate, concave, bearded. Capsule ovate. Lid tapering, oblique.

SYN. Grimmia lanceolata. *Sm. Fl. Brit.* 1186.

Leersia lanceolata. *Hedw. Crypt. v.* 2. 66. *t.* 23. *Ehrh. Crypt.* 133.

Encalypta lanceolata. *Sibth.* 278. *Hedw. Sp. Musc.* 63. *Turn. Musc. Hibern.* 19.

Bryum lanceolatum. *Dicks. Crypt. fasc.* 3. 4. *H. Sicc. fasc.* 11. 18. *With.* 824. *Hull.* 260. *Relh.* 422. *Abbot.* 240.

COMMON on dry barren heaths and banks, mud walls, and similar places, where it bears fruit in May.

The roots are perennial, longish. Plants crowded, various in height from a line to a quarter of an inch, simple, leafy. Leaves lanceolate, broadish, rather blunt, entire, tipped with a short white hair, which terminates the brownish midrib. Fruit-stalk upright, red, a little longer than the usual height of the stem, twisted by drying. Capsule erect, ovate, brown, smooth, a little contracted at the mouth. Lid but half as long as the capsule, awl-shaped or somewhat conical, inclining.

Hedwig justly indicates the resemblance of this plant to *Gymnostomum truncatulum*, and (we may add) to the species in our last plate; but his generic characters, too long overlooked, here prove eminently serviceable.

1409

1710.

Pteranum majus.

Published by Sol. Crowley, London

DICRANUM majus.

Great Clustered Fork-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* oblong. *Fringe* of 16 flat, cloven teeth, a little inflexed.

SPEC. CHAR. Stem branched. Leaves ovate, long-pointed, even, sickle-shaped and curved to one side. Fruit-stalks several from each sheath.

SYN. Dicranum majus. *Sm. Fl. Brit.* 1202. *Turn. Musc. Hibern.* 58.

Bryum reclinatum, foliis falcatis scoparum effigie, setis pluribus. *Dill. Musc.* 358. *t.* 46. *f.* 16. D.

TO this fine species we alluded in *v.* 5. *p.* 354. Our specimen was gathered on rocks near the sea at Bangor by Mr. Turner; the Rev. Mr. Dalton has sent the same from Yorkshire, and Mr. Borrer from Sussex. It bears fruit in the middle of summer, and is perennial.

The whole plant is larger than the common *D. scoparium*, and generally of a lighter and brighter green. Leaves all leaning to one side, falcate; broad and ovate in their lower part, even, not undulated, and furnished with a slender nerve. Each terminates in a very long roughish point. Fruit-stalks yellow, commonly 2 or 3 from the same sheath, which consists of many imbricated leaves. Capsule rather shorter than in *D. scoparium*, as well as thicker and somewhat more curved, dark brown, smooth and even. Lid awl-shaped, as long as the capsule. Veil brownish, slender. Fringe red.

Elyna caricina.

Jun.ª 1.1809. Published by Sir. Sowerby London

SCHOENUS monoicus.

Monoecious Bog-rush.

TRIANDRIA Monogynia.

GEN. CHAR. *Glumes* chaffy, clustered; the outer ones barren. *Cor.* none. *Seed* 1, roundish, among the glumes.

SPEC. CHAR. Stem round, naked. Spike compound. Flowers monoecious, in pairs. Leaves channelled, rough.

THE honour of making this singular plant known is due to Mr. Dickson, who gathered it in the county of Durham in 1799. The Rev. Mr. Harriman had indeed found it in 1797; but not being aware of its novelty, he liberally disclaims the merit of the discovery. For the same reason I can pretend to little of the honour, though I gathered the same species on Mount Cenis in August 1787, having ever since kept it unsettled in my herbarium. Indeed I have been deterred by the extraordinary difficulty of settling its genus. Every body, even the able Mr. Schkuhr when it was sent to him, took it for a *Carex*, and the greatest praise is due to Mr. W. Brunton for judging it a *Schoenus*. Mr. Harriman, to whom we are obliged for specimens, finds it wild on the mountain of Cronkley, Durham; also near Widdy bank in Teesdale forest.

The roots form dense perennial tufts, scaly at the crown with the brown bases of old leaves. Stems erect, solitary, 3 to 5 inches high, simple, naked, round, striated, angular and rough-edged at the summit. Leaves radical, sheathing the base of the stem, recurved, narrow, linear, channelled, acute, rough-edged. Stipula very short. Spike upright, an inch long, branched, brown, with a sheathing, keeled, brown, membranous bractea at each of its subdivisions, the lowermost pointed, and sometimes leafy. Flowers sessile, a male and a female together, each with its own simple glume which resembles the bracteæ. Stamina 3, capillary, longish. Antheræ linear, yellow. Germen oblong. Style simple. Stigmas 3, linear, downy. Seed without any other covering than the glume, oblong, triangular, horny, smooth, crowned with the base of the style.

The want of a tunic, and the structure of every part, prove it a *Schoenus*.

Festuca bromoides.

FESTUCA bromoides.

Barren Fescue-grass.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves. *Spikelet* oblong, somewhat cylindrical, two-ranked, with sharp-pointed glumes.

SPEC. CHAR. Panicle upright, pointing one way. Florets awl-shaped, awned, rough at the top. Leaves bristle-shaped, shorter than their sheaths.

SYN. Festuca bromoides. *Linn. Sp. Pl.* 110. *Sm. Fl. Brit.* 117. *Huds.* 46. *With.* 151. *Hull.* 23. *Sibth.* 44. *Ehrh. Calam.* 6. *Knapp. t.* 69.

Gramen paniculatum bromoides minus, paniculis aristatis, unam partem spectantibus. *Raii Syn.* 415. *Pluk Phyt. t.* 33. *f.* 10.

FOUND on dry sandy ground, sometimes on walls, but not common, flowering in June and July. The Rev. Mr. Hemsted sent it from Bedford.

Root annual, of numerous branching fibres. Stems several, forming tufts, about a span high or more, (for the plant varies much in size,) erect, round, very smooth, slender, leafy chiefly in their lower part, and furnished with 3 or 4 brown joints. Leaves light green, upright, slender and involute, acute; smooth at the back; roughish on their upper surface. They are short in proportion to their sheaths, which, except in the lowest leaves, are very long, a little inflated, furrowed, smooth, Stipula very minute. Panicle erect, from an inch to two inches in length, rarely more, spike-like, when luxuriant (as in our specimen) branched at the bottom; its stalks angular and roughish. The spikelets lean towards one side, but do not droop, and are ovate. Calyx-glumes acute, unequal, nearly smooth. Florets about 6, cylindrical, rough at their upper part, crowned with long terminal awns. Seed linear.

1412

1412*

FESTUCA Myurus.

Wall Fescue-grass.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves. *Spikelet* oblong, somewhat cylindrical, two-ranked, with sharp-pointed glumes.

SPEC. CHAR. Panicle drooping, pointing one way. Florets awl-shaped, awned, rough at the top. Leaves bristle-shaped, somewhat keeled, very short.

SYN. Festuca Myurus. *Linn. Sp. Pl.* 109. *Sm. Fl. Brit.* 118. *Huds.* 46. *With.* 151. *Hull.* 23. *Relh.* 37. *Sibth.* 44. *Abbot.* 21. *Dicks. H. Sicc. fasc.* 10. 2. *Knapp. t.* 70.

Gramen murorum, spicâ longissimâ. *Raii Syn.* 415.

THIS is much more frequent than the last in dry barren ground, and especially on the tops of walls, where its long inclining silky panicles, waving with every breath of wind, and growing in large tufts, easily excite attention. It is annual, and flowers in June and July.

It is not easy to define the difference between this and *F. bromoides*, and yet they are surely distinct. In every part of the flower they agree closely. The most striking distinction is the much longer, more slender, and somewhat drooping panicle of that now before us; its leaves also are commonly shorter, broader, and more angular.

Both these grasses are too deficient in herbage to be of any use in agriculture.

Mentha rubra.

Pub.1 1805 Published by Jas Sowerby London.

MENTHA rubra.

Tall Red Mint.

DIDYNAMIA Gymnospermia.

GEN. CHAR. *Cal.* 5-cleft. *Cor.* nearly regular, 4-cleft; its broadest segment notched. *Stamina* erect, distant.

SPEC. CHAR. Flowers whorled. Leaves ovate. Stem upright zigzag. Flower-stalks and lower part of the calyx very smooth; teeth hairy.

SYN. Mentha rubra. *Sm. Tr. of L. Soc. v.* 5. 205. *Fl. Brit.* 620.
M. sativa. *Sole Menth.*47 *t.* 24.
M. verticillata. *Raii Syn.* 232.
M. sativa rubra. *Ger. em.* 680.

GATHERED in September, 1804, under a hedge in the road from Watton to Saham church, Norfolk, where I have observed it for several years (see *Tr. of Linn. Soc.* and *Fl. Brit.*). The season being remarkably dry, the ditch was quite dried up, and the plant more hairy than usual; but the essential character of the smooth round polished flower-stalks and base of the calyx remained unchanged, though the calyx-teeth were hairy all over. On seeking about Saham mere, where several varieties of *M. hirsuta (Fl. Brit.* ♂, ♀) usually grow, I found only the common capitate kind. *M. piperita* had dwindled away almost to nothing.

M. rubra is the tallest and handsomest of our native species, rising to the height of 4 or even 6 feet, with a red wavy stem. Leaves ovate, of a dark shining green; the upper ones small and short. Whorls numerous, of many large reddish flowers. Bracteæ linear ringed. Calyx tubular, somewhat campanulate, dotted with resinous glands, its teeth always more or less hairy. The whole plant has a strong aromatic scent, especially in a dry soil. It is sometimes kept in gardens by the name of Heart Mint, in allusion to its cordial qualities, and is not very unfrequently found wild.

1414
818.

Calamintha
Nepeta.

Feb.ry 1.1805. Published by Jas Sowerby. London.

THYMUS Nepeta.

Lesser Calamint.

DIDYNAMIA Gymnospermia.

GEN. CHAR. *Cal.* 2-lipped, its orifice closed with hairs. Upper lip of the *corolla* flat, notched.

SPEC. CHAR. Whorls on foot-stalks, forked, many-flowered, longer than the leaf. Leaves serrated. Hairs in the mouth of the calyx prominent.

SYN. Thymus Nepeta. *Sm. Fl. Brit.* 642. *Relh.* 239.
Melissa Nepeta. *Linn. Sp. Pl.* 828. *Huds.* 263. *With.* 538. *Hull.* 135. *Sibth.* 190. *Curt. Lond. fasc.* 6. *t.* 40.
Calamintha odore Pulegii. *Raii Syn.* 243.

A NATIVE of dry calcareous hills and banks, about villages and by road sides, where it is generally found in abundance if at all. Our specimens were gathered near Saham church, Norfolk. It is a perennial plant, and flowers copiously in August and September.

Root somewhat creeping. Stems ascending, branched, square, rough, as is the whole herb. Leaves on foot-stalks, ovate, with a few broad serratures. Flower-stalks axillary, repeatedly forked, many-flowered, greatly exceeding in length their corresponding leaves. Bracteæ setaceous, in pairs at each fork of the stalks. Calyx-teeth all spreading; the two lowermost setaceous and longer than the others. White hairs very dense and prominent in the mouth of the calyx, which they close like a mouse-trap. Corrolla variegated with palet purple and white, externally downy. The hairs on the stem and flower-stalks all point backwards, the rest in a contrary direction. Every part is pungently aromatic, like Penny-royal but much more agreeable, and makes a pleasant stomachic tea for those who relish the mint-flavour at all.

The spreading upper teeth of the calyx, so different from the peculiar structure of the true *Melissa*, and the copious hairs in its mouth, as well as the whole habit, surely authorize the removal of this plant and the *Calamintha* to *Thymus*.

Bartsia
Odontites.

Feb.ʸ 1.1806. Published by Jas Sowerby London.

BARTSIA Odonites.

Red Bartsia.

DIDYNAMIA Angiospermia.

GEN. CHAR. *Cal.* in 4 lobes, mostly coloured. *Cor.* ringent, with a contracted orifice: *upper lip* concave, longest; *lower* in 3 equal reflexed lobes. *Caps.* ovate, compressed, with 2 cells, and many angular *seeds.*

SPEC. CHAR. Leaves lanceolate, serrated; the upper ones alternate. Flowers racemose, leaning one way. Antheræ smootish.

SYN. Bartsia Odonites. *Huds.* 258. *Sm. Fl. Brit.* 648. *Relh.* 240.

Euphrasia Odonites. *Linn. Sp. Pl.* 841. *With.* 543. *Hull.* 137. *Sibth.* 192. *Abbot.* 135. *Curt. Lond. fasc.* 1. *t.* 44. *Mart. Rust. t.* 42.

E. pratensis rubra. *Raii Syn.* *284.

THIS plant is not uncommon in corn fields, as at Battersea, &c. flowering in July and August. It prefers rather a strong and moist soil, and is most abundant on those cold clay springy grounds that hold too much water in winter.

Root fibrous, annual. Stem square, oppositely branched, rough with deflexed hairs. Leaves sessile, lanceolate, spreading, serrated, rough, opposite except the floral ones. Clusters terminal, long, leafy. Flowers all leaning one way, sessile. Calyx hairy, purplish, sometimes 5-cleft. Corolla of an elegant rose-colour, hairy; its upper lip undivided; lower in 3 not very unequal lobes. Antheræ large, smooth in front, more or less hairy at the back only, ending at the base in 2 little points. Style sometimes smooth, often hairy. Capsule a little compressed, hairy. Seeds numerous, small, angular, striated.

The undivided upper lip, the entire lobes of the lower, the want of long spines to the antheræ, and the angular (though striated) seeds, induce me to follow Hudson in the genus of this plant.

Euphrasia officinalis.

Feb.ʸ 1. 1805. Published by Jas. Sowerby, London.

EUPHRASIA officinalis.

Eye-Bright.

DIDYNAMIA Angiospermia.

GEN. CHAR. *Cal.* cylindrical, 4-toothed, equal. *Upper lip* of the *corolla* divided; *lower* of 3 cloven lobes. *Antheræ* bearded with unequal spines. *Caps.* ovate-oblong. *Seeds* striated.

SPEC. CHAR. Leaves ovate, furrowed, sharply toothed.

SYN. Euphrasia officinalis *Linn. Sp. Pl.* 841. *Sm. Fl. Brit.* 650. *Huds.* 269. *With.* 543. *Hull.* 136. *Relh.* 242. *Sibth.* 192. *Abbot.* 134 *Curt. Lond. fasc.* 5. *t.* 42. *Woodv. Suppl. t.* 220.
Euphrasia. *Raii Syn.* *284.

"FAM'D Euphrasy may not be left unsung,
That gives dim eyes to wander leagues around."

So at least thought Shenstone's school mistress, and we wish experience could confirm the tale of ancient times, which seems to have arisen from the brilliant eye-like blossoms of this little plant, which do indeed attract the eye at a considerable distance; and their beauty gratifies the sense, if their virtues cannot supply the defect of it.

Root small, fibrous and annual. Stem from 2 to 4 or 5 inches high, various in luxuriance, generally branching from the bottom, rough, often purplish. Leaves sessile, ovate, deeply toothed or serrated, rough, marked with strong lines where the veins run. Flowers about the top of the stem, axillary, sessile, solitary. Calyx angular, rough. Corolla various in size and colour, generally white striped with purple, and stained with yellow in front. It is often remarkable for size and beauty in dwarf plants, and in alpine situations. Each of the antheræ is armed with an unequal pair of spines at bottom. The seeds are few, small, striated, slightly angular.

Eye-bright grows on dry mountainous barren ground, and flowers throughout the autumn.

Trichomanes brevisetum.

Pubd 1 Nov. 1805 by Jas. Sowerby, London.

HYMENOPHYLLUM alatum.

Wing-stalked Filmy Leaf.

CRYPTOGAMIA Filices.

GEN. CHAR. *Fructifications* inserted into the margin of the frond, distinct. *Involucrum* 2-valved, flattish, straight, opening outwards, longer than the *column.*

SPEC. CHAR. Fronds tripinnate lobed, decurrent; segments linear, bluntish, entire. Main stalk and branches winged. Fructifications oblong, crenate, solitary at the upper edge of the base of each subdivision of the frond.

SYN. Hymenophyllum Tunbrigense β. *Sm. Fl. Brit.* 1142.

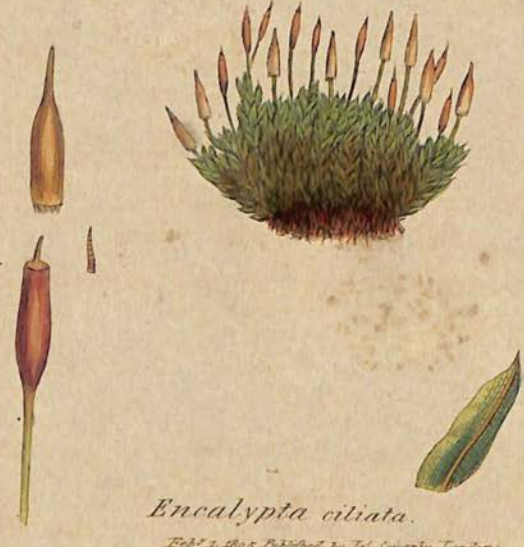
Trichomanes pyxidiferum. *Huds.* 461. *Bolt. Fil.* 56. *t* 30. *With.* 781. *Hull.* 243.

T. Tunbridgense var. 3. *With.* 782. *Hull.* 244.

Filix humilis repens, foliis pellucidis et splendentibus, caule alato. *Dill. in Raii Syn.* 127. *t.* 3. *f.* 3, 4.

WE have at length received specimens, one of them in fructification, of this rare fern, gathered in the county of Kerry, Ireland, by Mr. Mackay, gardener to the botanic garden at Dublin. We are now competent to describe it as a new species. That it is not the American *Trichomanes pyxidiferum* of Linnæus and Swartz, is plain from Plumier's figure, our only authority; nor dos it agree with the characters of any *Hemenophyllum* in Dr. Swartz's Essay on ferns in Schrader's Journal. It manifestly differs from *H. Tunbridgense, v.* 3. *t.* 162, in its much greater size and more compound frond, and in its main stalk being winged from the very bottom; but more especially in the margin of the segments being always entire, and in the *involucrum* or *calyx*, being oblong and cylindrical, not obovate and compressed, except towards the summit: neither is its margin serrated or toothed, but slightly and obtusely crenate. Few of our British plants have been more enveloped in doubt than this; very few could better repay the scrutiny of the curious botanist.

1418
1746.



Encalypta ciliata.

Pubd 1 Mar 6. Published by Jas Sowerby, London.

ENCALYPTA ciliata.

Fringed Extinguisher-moss.

CRYPTOGAMIA Musci.

GEN. CHAR, *Caps.* cylindrical. *Fringe* of 16 linear upright teeth. *Veil* campanulate, inflated, wide.

SPEC. CHAR. Veil toothed at the margin. Stem branched. Leaves lanceolate.

SYN. Encalypta ciliata. *Hewd. Sp. Musc.* 61. *Sm. Fl. Brit.* 1181. *Turn. Musc. Hibern.* 18.

Leersia ciliata. *Hedw. Crypt. v.* 1. 49. *t.* 19.

Bryum extinctorium. *Linn. Sp. Pl.* 1581. *Huds.* 476. *With.* 817. *Hull.* 258. *Lightf.* 719.

B. calyptrâ, extinctorii figurâ majus et ramosum. *Dill. Musc.* 350. *t.* 45. *f.* 9.

A NATIVE of rocky mountainous places, specimens of which gathered near Ripon, Yorkshire, have been sent us by Mr. W. Brunton junior. It is found in fruit in the summer season, and is perennial.

This species differs from the more common *Encalypta vulgaris* (figured by the name of *Bryum extinctorium* in our 8th vol. *t.* 558) in being generally of a larger size, with taller and more branching stems, but particularly in having a longer and more slender point to the veil, and in the border of that part being curiously fringed with an indeterminate number of flat membranous teeth, which when numerous are narrow, when few broad. These two latter circumstances are enough to fix the species. We alluded to it in p. 558, when under some doubts whether it were more than a variety.

Pubd 1 Aug 5 Published by Jas Sowerby London

ENCALYPTA alpina.

Alpine Extinguisher-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* cylindrical. *Fringe* of 16 linear upright teeth. *Veil* campanulate, inflated, wide.

SPEC. CHAR. Veil roughish at the margin. Stem branched. Lid as long as the capsule. Leaves ovato-lanceolate, acute; the uppermost hair pointed.

GATHERED on rocks about the very summit of Ben Lawers by Mr. G. Don in October, 1804. We have never seen it before, nor can we meet with any description answerable to it.

The whole plant is smaller than that in our last plate. Stems branched, forming tufts scarcely an inch high. Leaves dark-green with a red rib, lanceolate inclining to ovate, entire, pointed; the uppermost tipped each with a longish hair, inflexed when dry. Fruit stalks terminal, red, half an inch long. Capsule erect, somewhat elliptical, with a slender lid of its own length. Veil with a longish point, the edge by no means fringed, nor yet quite smooth, but a little rough or uneven.

1735.

Weissia cirrata

Feb.ʸ 1 1808 Published by Jas. Sowerby London

GRIMMIA Dicksoni.

Dicksonian Grimmia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* simple, of 16 teeth, broadest at their base. *Flowers* terminal. *Veil* cylindrical.

SPEC. CHAR. Leaves linear-lanceolate, keeled, curled when dry. Capsule cylindrical, somewhat elliptical, contracted at the mouth. Lid slender.

SYN. Grimmia Dicksoni. *Sm. Fl. Brit.* 1188. *Turn. Musc. Hibern.* 27.

Weisia Dicksoni. *Willden. Berol.* 303.

W. cirrata. *Hewd. Sp. Musc.* 69. *t.* 12. *f.* 7—12.

Mnium cirratum. *Linn. Sp. Pl.* 1576.

Bryum Dicksoni. *Dicks. Crypt. fasc.* 3. 4. *With.* 826. *Hull.* 261.

B. cirratum et stellatum, tenuioribus foliis. *Dill. Musc.* 379. *t.* 48. *f.* 42.

B. trichoides exile, erectis capitulis in pediculis longioribus rubris. *Dill. in Raii Syn.* 97.

THIS is found on park walls and pales in many different parts of England, bearing fruit about April. It is nearest allied to *G. controversa*, figured in *t.* 1367, but differs in being about thrice as large, with longer and more cylindrical capsules, brown, smooth, and delicately formed, remarkably contracted at their orifice, by which last character they are readily known from every other British *Grimmia*, and especially from the *G. cirrata* of *Fl. Brit.* The fringe is small and red, as well as the edge of the capsule. Lid very slender from just above the base. Leaves bright green, narrow, acute, entire, much curled when dry. Fruit-stalks slender, yellowish.

As Professor Wildenow has most unfortunately mistaken this for the moss so well illustrated by Mr. Dickson (*G. controversa*), and has therefore called it by his name, we would not change it, though *cirrata* should more properly belong to this species.

Weisia nuda.

Febr 1 1805. Published by Jas Sowerby London.

GRIMMIA nuda.

Naked Grimmia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* simple, of 16 teeth, broadest at their base. *Flowers* terminal. *Veil* cylindrical.

SPEC. CHAR. Leaves lanceolate, entire, acute, beardless. Capsule roundish, inclining, smooth. Stem none.

SYN. Grimmia nuda. *Sm. Fl. Brit.* 1197. *Turn. Musc. Hib.* 25.

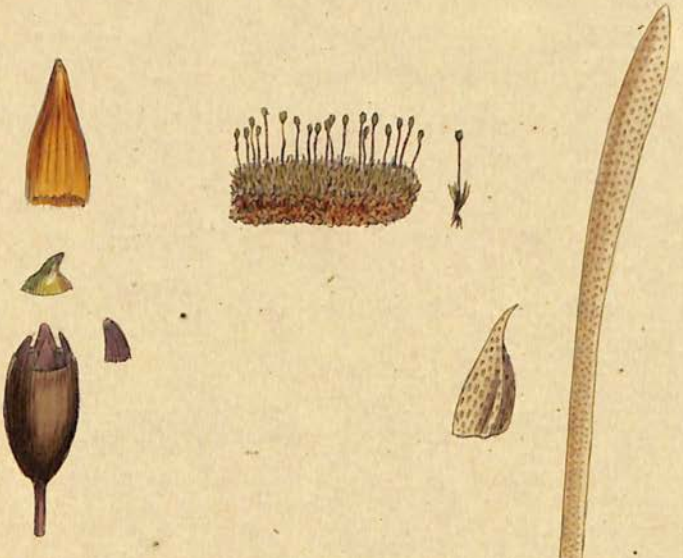
Bryum nudum. *Dicks. Crypt. fasc.* 4. 7. *t.* 10. *f.* 15.

OUR specimens of this rare moss were gathered on clay banks by the side of the Tay, near Perth, by Mr. G. Don. It was first discovered by Mr. G. Caley, now on an expedition to New South Wales, in similar situations near Manchester. We have received from Dr. Swartz specimens of the same species, named *Weisia rosea*, found in Lapland by Mr. Wahlenberg, who has lately made great botanical discoveries in that sequestered country.

The root is small, fibrous, and presumed to be annual. Stem altogether wanting. Leaves few, radical, erect, of a pale dull transparent green, lanceolate, sharp-pointed, entire. Stalk solitary, erect, an inch or more in height, slender, rather zigzag, of an equal thickness throughout, rose-coloured, except at the top, where it is green when young. Capsule inclining, almost globular, truncate, smooth, pale brown with a red edge. Fringe upright, red. Lid conical, short and obtuse while young, afterwards curved, contracted and acute.

Of the precise time of the capsules coming to maturity we are not informed.

1422
1760.



Tetraphis Browniana.

Feb.ry 1.1805. Published by Jas Sowerby, London.

GRIMMIA Browniana.

Brownian Grimmia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* simple, of 16 teeth, broadest at their base. *Flowers* terminal. *Veil* cylindrical.

SPEC. CHAR. Radical leaves linear, flat; floral ones ovate, concave; all dotted. Capsule elliptical, erect, smooth. Stem none.

SYN. Bryum Brownianum. *Dicks. Crypt. fasc.* 4. 7. *t.* 10. *f.* 16.

Orthotrichum Brownianum. *Sm. Fl. Brit.* 1269.

FEELING it a duty to correct every error of which I am convinced, I take the earliest opportunity afforded me by numerous perfect specimens of this moss, gathered by Mr. W. Brunton on sand-stone rocks at Lord Grantley's lakes near Ripon, to remove it from *Orthotrichum* to *Grimmia*, to which its agreement in many respects with the species in the last plate has finally determined me. Having previously seen but one very poor specimen, and an incomplete drawing, I was led chiefly by the ribbed veil, which I still know only from that drawing, to suppose it an *Orthotrichum*, for such a veil is scarcely found in any other genus.

The root is small, fibrous, and probably annual. Stem none. Radical leaves few, erect, linear, very narrow, a little dilated upwards, obtuse, entire, ribless: those which form a *perichætium*, at the base of the fruit-stalk, are short, ovate, acute, with a central rib: all the leaves are of a pale olive brown, pellucid, dotted or reticulated. Stalk solitary, red. Capsule erect, ovate, smooth, brown. Lid short, acute, oblique when at maturity. Fringe red, the teeth cohering in pair.

1423

1623.

Orthotrichum cupulatum.

March 1 1805. Published by Jas Sowerby, London.

ORTHOTRICHUM anomalum.

Rough Single-fringed Bristle-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* oblong, terminal. *Outer fringe* of 16 teeth: *inner* of 8 or 16 bristles; or none. *Veil* angular, mostly clothed with erect hairs.

SPEC. CHAR. Stem branched. Leaves lanceolate, keeled, revolute. Fringe simple. Veil hairy, toothed.

SYN. Orthotrichum anomalum. *Sm. Fl. Brit.* 1267. *Hedw. Sp. Musc.* 162. *Crypt. v.* 2. 102. *t.* 37. *Dicks. Crypt. fasc.* 4. 6. *Turn. Musc. Hib.* 94.

Bryum striatum β. *Linn. Sp. Pl.* 1580.

B. tectorum. *With.* 810.

Polytrichum striatum β. *Huds.* 471. *Relh. ed.* 1. 397.

P. tectorum. *Hull.* 248.

P. Bryi ruralis facie, capsulis sessilibus, minus. *Dill. Musc.* 431. *t.* 55. *f.* 9.

P. capsulis subrotundis, pediculis brevissimis insidentibus, calyptrâ striatâ, arboreum et terrestre, minùs ramosum, et breve. *Raii Syn.* 91.

Weissia anomala. *Sibth.* 287.

NOT rare on old buildings and stones, bearing fruit in February and March. We first found it on rocks near Edinburgh 22 years ago. It grows in dense perennial tufts, of a dull brownish green. It agrees with *O. nudum, t.* 1325, in having no internal fringe, but differs in its revolute leaves and hairy veil, which becomes toothed or torn, and at length loses its hairs, by age. The fruit-stalks when full-grown are longer than in most of the genus. The lid is flat with a slender beak.

1424
1547

Hypnum
splendens.

Mar. 1. 1803. Published by Jas. Sowerby, London.

HYPNUM splendens.

Shining Tamarisk Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem doubly pinnate, flattish. Leaves closely imbricated every way, ovate, concave, nerveless, shining, tipped with a little point. Lid awl-shaped, recurved.

SYN. Hypnum splendens. *Hedw. Sp. Musc.* 262. *t.* 67. *f.* 6—9. *Sm. Fl. Brit.* 1295. *Sibth.* 295. *Turn. Musc. Hib.* 156.

H. parietinum. *Huds.* 499. *With.* 853. *Hull.* 271. *Lightf.* 751. *Relh.* 434. *Abbot.* 247.

H. filicinum, tamarisci foliis majoribus splendentibus. *Dill. Musc.* 274. *t.* 35. *f.* 13.

H. repens filicinum, veluti spicatum. *Raii Syn.* 86.

FOUND in dry woods and on mountainous heaths, where it bears fruit about March or April, retaining its ripe capsules a long time, but in the southern counties the fructification is not very usual.

Stems perennial, a span or more in length, decumbent, elastic and loosely entangled, proliferous, interrupted, doubly pinnate, purple and shining under the leaves, which for the most part closely cover them, and are imbricated, of a pale shining yellowish green, small, ovate, concave, without a nerve; those on the main stem obscurely serrated and long-pointed; the rest entire and pointless. The scaly sheaths are generally crowded near together, each bearing one crimson shining fruit-stalk. Capsule inclining, of a rusty hue, ovate, smooth, taper at the base. Lid taper, longish, conical at the base, recurved.

Linnæus confounded this with his dark-green unpolished *H. proliferum*, *Curt. Lond. v.* 1. *t.* 72; but having quoted *Dill. t.* 35. *f.* 13. for his *parietinum*, the moss before us has gone by that name.

1425

1567.

Hypnum cuspidatum.

March 1. 1805. Published by Jas. Sowerby London.

HYPNUM cuspidatum.

Pointed Bog Feather-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* ovate-oblong, from a lateral scaly sheath. *Outer fringe* of 16 teeth, dilated at the base: *inner* a variously-toothed membrane. *Veil* smooth.

SPEC. CHAR. Stem pinnate, round. Branches pointed. Leaves oblong-lanceolate, nerveless, smooth, imbricated every way. Lid conical, acute.

SYN. Hypnum cuspidatum. *Linn. Sp. Pl.* 1595. *Sm. Fl. Brit.* 1317. *Hedw. Sp. Musc.* 254. *Huds.* 505. *With.* 862. *Hull.* 273. *Relh.* 437. *Sibth.* 300. *Abbot.* 250. *Dichs. H. Sicc. fasc.* 7. 20. *Turn. Musc. Hib.* 177.

H. palustre, extremitatibus cuspidatis et pungentibus. *Dill. Musc.* 300. *t.* 39. *f.* 34.

H. repens palustre, foliis triangularibus per caules expansis, extremitatibus convolutis et acuminatis. *Raii Syn.* 82.

THIS is a native of wet plashy meadows and clear springs, bearing fruit plentifully in March and April.

The stems are upright, various in their length, which is generally 6 or 8 inches. Their whole form is lanceolate and acute, composed of several short, two-ranked branches, the uppermost of which, as well as the main stem, are pointed, almost pungent, with a sort of bud, composed of leaves closely enfolding each other. The leaves are of a light shining green, imbricated, rather spreading, oblong, acute, entire, without ribs, veins, or plaits. Fruit-stalks 2 or 3 inches long, red, their sheaths of long whitish striated leaves. Capsule ovate-oblong, much curved, of a red tawny hue, smooth. Lid conical, short, acute.

1426

2075

Lecidea

ulmicola?

March 1 1805. Published by Jas. Sowerby, London.

LICHEN luteo-albus.

White and yellow Crustaceous Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

SPEC. CHAR. Crust leprous, white, very thin and even. Shields orange-coloured; when young flattish, with a border of their own colour; at length convex, without a border.

SYN. Lichen luteo-albus. *Turner in Trans. of Linn. Soc. v.* 7. 92. *t.* 8. *f.* 3.

IT is remarkable that this pretty species should have remained so long undescribed. That it is not very uncommon in England is certain. We have had it from various friends, as Dr. Abbot, Mr. W. Brunton junior, Mr. Turner, the Rev. Mr. Walford of Long Stratton, and the Rev. Mr. Harriman. Neither is it difficult to discover. It grows on old trees, either on their cracked bark or in their decayed cavities, apparently not thriving on live wood. The crust is thin, even, finely leprous, very white (at least when dry), bearing prodigious abundance of little bright orange-coloured shields, generally crowded together in parcels or rows. When young they are flat, with a border coloured like the disk; but by age they grow very convex and lose their border.

There is a little yellow *Peziza* found on cow-dung, which seems confounded with the *scutellata*, and another on rotten wood, *P. aurea*, *Sowerby t.* 150, which being very common, and somewhat resembling this Lichen, may have caused it to be passed over by many observers.

1427

2204.

Collema tenuissimum

March 1. 1805. Published by Jas. Sowerby, London.

LICHEN tenuissimus.

Fine-cut gelatinous Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

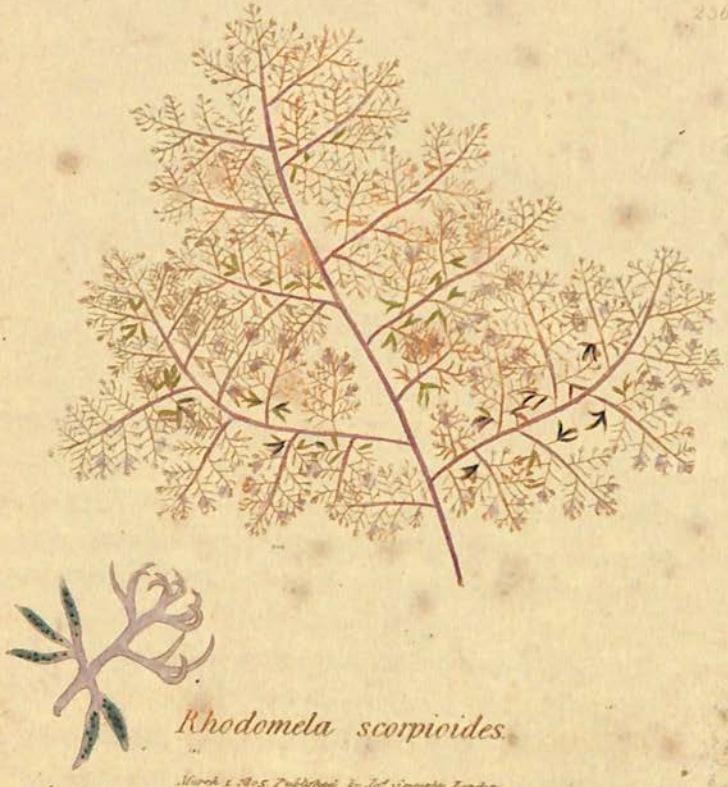
SPEC. CHAR. Imbricated, gelatinous, greenish black. Leaves much divided, into linear unequal somewhat fringed segments. Shields sessile, reddish brown, with a thick entire border.

SYN. Lichen tenuissimus. *Dicks. Crypt. fasc.* 1. 12. *t.* 2. *f.* 8. *Achar. Prod.* 139. *With. v.* 4. 61. *Hull.* 298.

Parmelia tenuissima. *Achar. Meth.* 244.

WHEN Mr. Dickson first paid a visit to Norwich in the year 1782, this was one of the new cryptogamic plants then first made known to him by its discoverer Mr. Crowe. Twenty more, at least, of the same class rewarded their researches during his stay, most of which have been published since. This species grows on dry sandy banks among short grass or moss. Mr. Woodward found it very fine at Ditchingham, from whence Mr. Turner has sent us specimens.

The fronds or leaves are very minute and crowded, forming a patch an inch or two broad, of an exceedingly deep olive brown, almost black. Their texture is thin and gelatinous; their form palmate; their lobes linear, unequal, jagged or fringed. The shields are large in comparison of the leaves, sessile, flat, very dark brown, with a thick elevated entire border, nearly of the same colour. By drying they become paler and more reddish. The border is not leafy, as it should seem, by Mr. Dickson's figure, to be.



Rhodomela scorpioides.

March 1. 1805. Published by Jas. Sowerby, London.

FUCUS amphibius.

Amphibious Curve-pointed Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in clustered tubercles, which burst at their summits.

SPEC. CHAR. Frond capillary, much branched. Branches and all their subdivisions alternate, rolled in at their points.

SYN. Fucus amphibius. *Huds.* 590. *Gooden. and Woodw. Tr. of Linn. Soc. v.* 3. 227. *Turn. Syn.* 391. *With. v.* 4. 116. *Hull.* 327. *Stackh. Ner. t.* 14.

F. scorpioides. *Huds. ed.* 1. 471. *Gmel. Fuc.* 135.

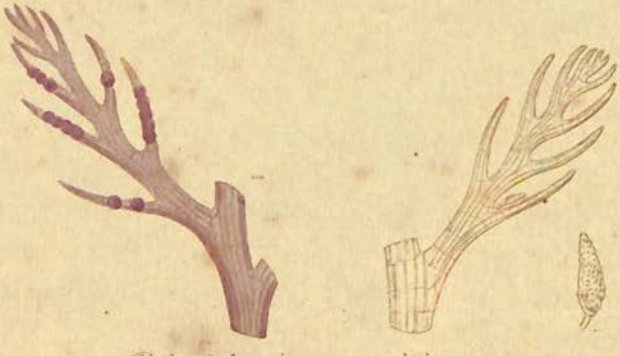
Fucoides erectum fruticuli specie, summitatibus inflexis. *Dill. in Raii Syn.* 38. *t.* 2. *f.* 6.

GROWS on rocks and stones on the sea shore about high-water mark, or in salt marshes; frequently, as Mr. Turner observes, attached to the roots and stems of other sea plants.

The fronds form dense tufts, from 1 to 3 inches in height, of a pale livid or reddish brown. They are capillary, repeatedly and alternately subdivided; their ultimate segments acute, and singularly incurved or rolled in, like the tail of a scorpion, or at least like many other plants compared to the tail of that animal; hence Hudson's original name *Scorpioides*, which having been adopted by Gmelin, it is strange that he should have changed it afterwards, for no purpose, himself. The fructification consists of 2 irregular rows of dark seeds, in the swelled lateral branches.

It is Dillenius, not Ray, who has described and figured this plant in the third edition of the *Synopsis*. This distinction is but just when we criticise any of the figures in that edition; for want of attending to it Mr. Sole has made some ridiculous mistakes in *p.* 20 of his work on Mints.

1429
2440



Polysiphonia parasitica?

March 1. 1805. Published by Jas Sowerby London.

CONFERVA parasitica.

Parasitical Feathered Conferva.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in round, solitary, closed tubercles, projecting from the frond, but united with it.

SPEC. CHAR. Purplish brown, branched, doubly pinnate. Fructifications axillary, solitary, oblong.

SYN. Conferva parasitica. *Huds.* 604. *With. v.* 4. 142. *Hull.* 335.

FOR this rare* Conferva, found growing on other submarine plants on the Yorkshire coast, we are obliged to Sir Thomas Frankland, who knows it to be the species described by Hudson, the only original writer who mentions it.

The frond grows from a small branched root to the height of an inch or more, and is very slender, round, alternately branched, the branches doubly and alternately pinnated, their ultimate segments acute. The whole has the same jointed and tubular structure as *C. byssoides, v.* 8. *t.* 547. The little branches are often studded with warts, which are seen in many *Confervæ*, but not supposed to have any share in the fructification†. The real fruit, apparently, has been detected by Sir T. Frankland, whose drawing we copy, in the form of an oblong solitary axillary spike of seeds or capsule. If it be really so, the plant better agrees with the generic character of *Fucus*, except in its jointed structure. See the doubts on this subject relative to *C. byssoides, p.* 547.

* Dr. Withering here translates Mr. Hudson's word *passim*, "common," which is right in language, but wrong in fact, for we know that he and the botanists of his school always mean extreme rarity by that word.

† Mr. Turner.

March 1, 1815. Published by Sir. Sowerby, London

FESTUCA uniglumis.

Single-husked Fescue-grass.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves. *Spikelet* oblong, somewhat cylindrical, two-ranked, with sharp-pointed glumes.

SPEC. CHAR. Panicle upright, pointing one way, nearly simple. Florets awl-shaped, compressed, awned. One valve of the calyx very short.

SYN. Festuca uniglumis. *Soland. in Ait. H. Kew. v.* 1. 108. *Sm. Fl. Brit.* 118. *Dicks. H. Sicc. fasc.* 17. 1. *Knapp. t.* 71.

Stipa membranacea. *Linn. Sp. Pl.* 116? *Mant.* 2. 326?

Lolium bromoides. *Huds.* 55. *With.* 169. *Hull.* 27.

Festuca avenacea sterilis humillima, spicâ unam partem spectante. *Dill. in Raii Syn.* 413. *n.* 3. *t.* 17. *f.* 2, but not *Raii Syn. ed.* 2. 261. 4.

FOUND on the sandy sea shore of Sussex, from whence we have several times received specimens. It flowers in June, and varies greatly in luxuriance according to the moisture of the season.

Root biennial, fibrous. Stems several, from 4 to 6 inches high, nearly upright, angular, smooth, leafy, often branched below. Leaves smooth, a little involute, with broad inflated sheaths. Stipula very short. Panicle upright, very little compound, its branches leaning all one way, compressed, with rough edges. Spikelets upright, lanceolate, flattish. Outer valve of the calyx almost as long as the spikelet, awl-shaped, awned, rough: inner very minute, scarcely perceptible without a glass; it is however present, and every analogy requires that it should be called a valve, though so very small, in which particular this species essentially differs from those in *t.* 1411 and 1412. *Stipa membranacea* of Linnæus, a real *Festuca*, seems only a more luxuriant state of this grass.

Helosciadum repens

March 1, 1828. Published by Jas. Sowerby, London.

SIUM repens.

Creeping Water Parsnep.

PENTANDRIA Digynia.

GEN. CHAR. *Fruit* nearly oval, compressed, striated. *Involucrum* general and partial, of many leaves. *Petals* heart-shaped, uniform.

SPEC. CHAR. Leaves pinnated; leaflets roundish, deeply toothed. Umbels on stalks, opposite to the leaves. Stem creeping.

SYN. Sium repens. *Linn. Suppl.* 181. *Sm. Fl. Brit.* 314. *With.* 300. *Hull.* 61. *Relh.* 114. *Sibth.* 97. *Abbot.* 63. *Jacq. Fl. Austr. t.* 260.

PROBABLY this species may have been overlooked by former botanists as a small variety of *Sium nodiflorum*, see *v.* 9. *t.* 639, till Jacquin described it in his valuable *Flora Austriaca*. Since he observed it, many others have recognized it in various places. Our specimens were sent from near Edinburgh by the late Mr. Mackay. It flowers in July and August, and is perennial, growing in moist boggy meadows, but not in ditches.

The stems are quite prostrate, creeping by means of several radicles. Leaves formed of a few roundish or wedge-shaped leaflets, the odd one generally three-lobed; all coarsely and bluntly toothed, not regularly serrated as in other species. Umbels on considerable stalks opposite to each leaf, and formed of a few divaricated partial umbels, composed of numerous white flowers. General and partial involucrum of several ovate, ribbed, spreading leaves. Calyx scarcely perceptible. Fruit small, roundish. Antheræ yellow.

COLCHICUM autumnale, *flor. serotinis.*
Tardy-flowering Meadow Saffron.

HEXANDRIA Trigynia.

GEN. CHAR. *Cal.* a spatha. *Cor.* in 6 divisions, tube arising from the root. *Capsules* 3, connected and inflated.

SPEC. CHAR. Leaves plane, lanceolate, and erect.
Var. with late green abortive flowers.

A REPRESENTATION of this plant in its proper and usual state may be found in our 2d *vol. t.* 133. It is not without reluctance that we admit any varieties or monstrosities into this work, but so extraordinary an appearance as the present, so puzzling to common observers, and no where, to our knowledge, mentioned, cannot surely be unacceptable.

We are informed by Mr. Salmon, to whom we are obliged for specimens, that this plant has been observed for 6 or 7 years past in a meadow near Devizes, Wilts, in the months of April or May. It is unquestionably no other than *Colchicum autumnale* bearing leaves at its proper season, and along with them, from the same bud, tardy abortive flowers, which should have come forth the autumn before, and by this time have perfected seed. Instead of which their stamens and other parts are imperfect, there is no pollen in the antheræ, and even the corolla is drawn out into long greenish ill-coloured segments, owing as it should seem to the cold and moisture of the vernal season. This however must be esteemed a *late* and not an *early* flowering variety with respect to its usual mode of production.

Glaucium phœniceum.

March 1 1833. Published by Jas. Sowerby, London.

GLAUCIUM phoenicium.

Red Horned-Poppy.

POLYANDRIA Monogynia.

GEN. CHAR. *Cal.* of 2 leaves. *Petals* 4. *Pod* superior, linear, of 2 cells, and 2 or 3 valves. *Seeds* numerous, dotted.

SPEC. CHAR. Stem hispid. Stem-leaves pinnatifid, jagged. Pod bristly.

SYN. Glaucium phoenicium. *Sm. Fl. Brit.* 564. *Gærtn. v.* 2. 165. *t.* 115.
G. corniculatum. *Curt. Lond. fasc.* 6. *t.* 32.
Chelidonium corniculatum. *Linn. Sp. Pl.* 724. *Huds.* 229. *With.* 484. *Hull.* 116.

A NATIVE of sandy cornfields, which Mr. Hudson says was sent him from Norfolk by Mr. Stillingfleet with the Violet Horned-Poppy. The latter certainly is wild in those parts of the county, where Mr. Stillingfleet used to pass most of his time, but no other person has ever seen the present species in that or any other part of Britain! In Chelsea garden it has from time immemorial come up every year as a weed, and we have, as well as Mr. Curtis (though he has not acknowledged it) drawn a garden specimen. We are the more inclined to publish this beautiful plant just now, that it may appear how it differs from *G. fulvum*, given in *Exotic Botany tab.* 7, which has been taken for it.

G. phoenicium is, like that, truly annual, flowering in June and July, and the flowers are very short-lived though produced in long succession. The stem is 2 feet high, branched, clothed with horizontal hairs. Leaves all deeply pinnatifid, glaucous, roughish, jagged and toothed. Flowers on stalks, scarlet, half the size of *G. fulvum*. Pod rough with longish rigid close bristles. The very different stem-leaves are sufficient to prove it distinct from that species.

Salix
acuminata.

SALIX acuminata.

Long-leaved Sallow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves lanceolate-oblong, pointed, waved, slightly toothed; downy beneath. Stipulæ kidney-shaped. Capsules ovate, tapering.

SYN. Salix acuminata. *Sm. Fl. Brit.* 1068. *Hoffm. Sal. v.* 1. 39. *t.* 6. *f.* 1, 2. *With.* 53. *Hull.* 219. *Sibth.* 17.

S. caprea acuto longoque folio. *Raii Syn.* 450.

THIS tree, which rises to a moderate height and produces catkins early in April, is by no means uncommon in woods and hedges, preferring rather a moister situation than the Common Sallow, *S. caprea*, of which it has been considered as a variety. Miller first described it for a distinct species by the above name, and Hoffmann has well illustrated it.

The branches are round, when young clothed with soft short down. Leaves on footstalks, about 3 inches long, lanceolate, acute, often dilated a little above the middle, the margin more or less waved and slightly toothed towards the point; the upper surface is smooth and green; the under finely and closely downy, with parallel curved veins, which are often reddish. Stipulæ half-ovate when young, but afterwards curved and kidney-shaped, toothed. Catkins ovate inclining to cylindrical, with ovate pointed hairy scales. Stamina 2, yellow. Capsule on a long stalk, ovate, tapering, downy, with a short style, and thick obtuse stigmas.

1336.

Salix triandra.

April 1 1805. Published by Jas. Sowerby, London.

SALIX triandra.

Long-leaved triandrous Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Stamina three. Leaves linear-oblong, serrated, smooth. Germen on a stalk.

SYN. Salix triandra. *Linn. Sp. Pl.* 1442. *Sm. Fl. Brit.* 1044. *Tr. of L. Soc. v.* 6. 118. *Huds.* 425. *With.* 45. *Hull.* 217. *Relh.* 384. *Sibth.* 15. *Abbot.* 212. *Curt. Lond. fasc.* 6. *t.* 72. *Hoffm. Sal. v.* 1. 45. *t.* 9, 10. *t.* 23. *f.* 2.

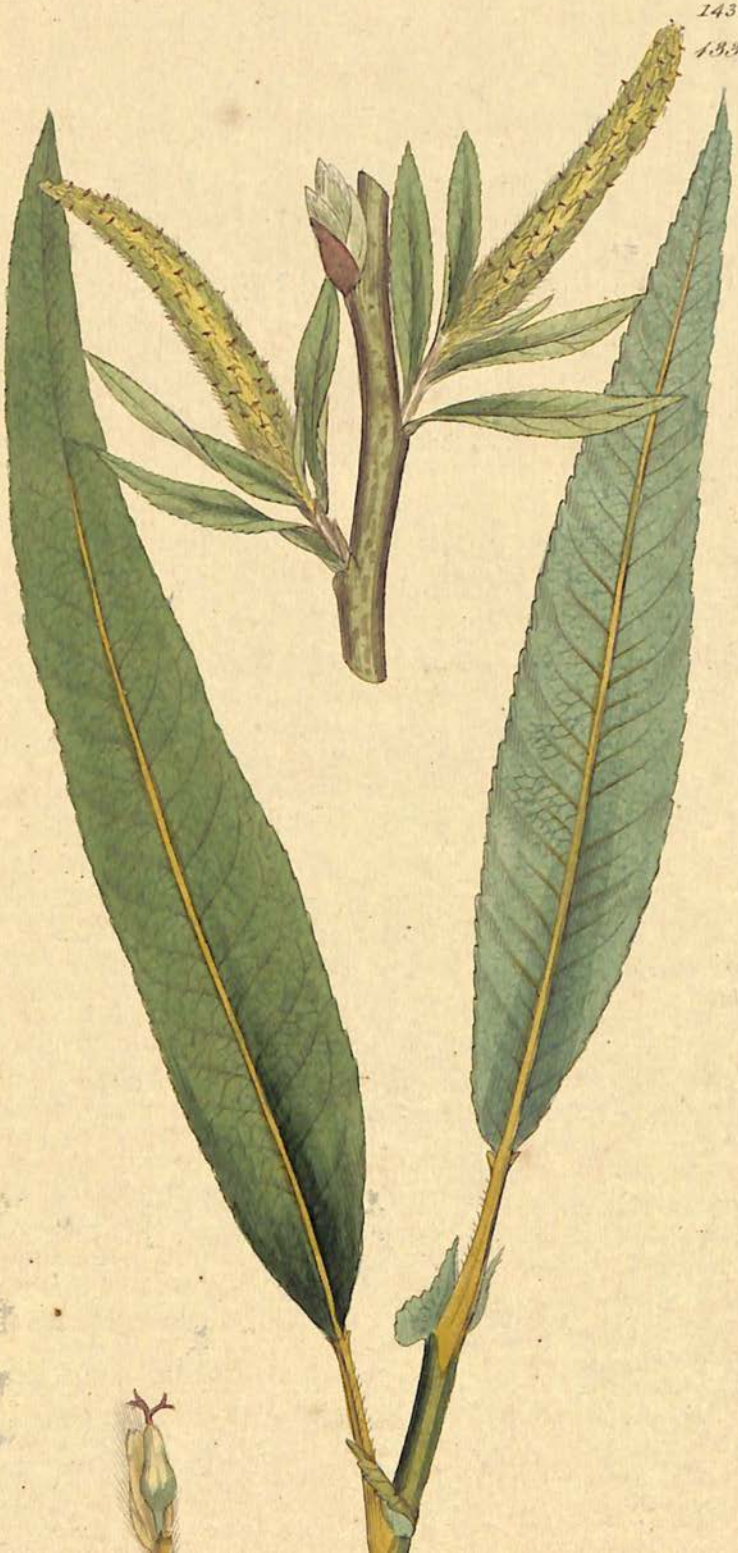
S. folio amygdalino utrinque aurito, corticem abjiciens. *Raii Syn.* 448.

WHEN undisturbed, this species grows to a large tree, and is common in wet woods and hedges, flowering in April or May, and frequently again in August; but being an excellent Osier, it is generally seen treated as such, and cut down every year. It produces tough, pliable and lasting rods 8 or 9 feet long, and its several varieties (which differ in the darkness or straightness of the leaf, and in fecundity of growth) are all valued by basket-makers.

The bark of the trunk and branches scales off annually in large portions, as in the Plane-tree. The young branches are upright, round and smooth. Leaves 2 or 3 inches long, linear-oblong, acute, closely serrated, smooth on both sides, paler beneath, the base narrow, and sloping off (not rounded) towards the stalk. Stipulæ ovate, oblique, crenate, at length rounded and reflexed. Catkins cylindrical, yellow, with hairy blunt scales. Nectary very obtuse. Stamina mostly 3. Germen stalked, ovate, smooth, compressed. Stigmas short, nearly sessile, spreading, cloven.

1436

1335.



SALIX lanceolata.

Sharp-leaved Triandrous Willow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Stamina three. Leaves lanceolate, tapering toward each end, serrated, smooth. Footstalks decurrent. Germen on a stalk.

SYN. Salix undulata. *Ehrh. Arb.* 108?

THIS is one of those Willows omitted in the *Flora Britannica* for want of sufficient observations at that time to determine it as a species. It has long been observed by Mr. Crowe, and is perhaps not uncommon. We have lately received specimens, gathered wild in Sussex, from Mr. Woollgar of Lewes, accompanied with many intelligent remarks upon this species, as well as several varieties (as they appear to us) of the foregoing, and some others.

This grows to a small tree, casting its bark like the last, and flowering in April or May. It is easily distinguishable by its much longer, more pointed and tapering leaves, as well as stipulæ, and particularly by the base of the footstalk running down remarkably along the branch. The leaves have often a small pair of leaflets at their base. The germen is more constricted and pointed than in *S. triandra*, but in other respects the parts of fructification nearly accord.

Basket-makers, as Mr. Woollgar informs us, know this well from *S. triandra*, and do not esteem it so much, as the rods when peeled are apt to split in working; but they are very good for brown hampers, crates, &c.

This is very near Ehrhart's *S. undulata*, but his leaves are more rounded at the base, nor do we see how the name applies to our plant.

1437.
1361.

Salix aquatica.

SALIX aquatica.

Water Sallow.

DIOECIA Diandria.

GEN. CHAR. Male, *Cal.* the scales of a catkin. *Cor.* none. *Nectary* a gland at the base of the stamina. *Stam.* 1—5. Female, *Cal.* and *Nect.* like the male. *Cor.* none. *Stigmas* 2. *Caps.* superior, of 1 cell and 2 valves. *Seeds* downy.

SPEC. CHAR. Leaves slightly serrated, obovate-elliptical, downy, flat; rather glaucous beneath. Stipulæ rounded, toothed.

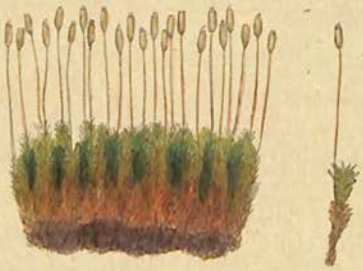
SYN. Salix aquatica. *Sm. Fl. Brit.* 1065.
S. caprea α. *Huds.* 429.
S. cinerea. *With.* 54. *Hull.* 219. *Relh.* 387.
S. aurita. *Hoffm. Sal. t. 5. f.* 3.
S. folio ex rotunditate acuminato. *Raii Syn.* 449.

"PERHAPS," as Dr. Withering remarks, "this is the most common of all our Willows, as well in hedge rows as in woods." It is not however the *cinerea*, though very near it. Their differences we hope one day to be furnished with full materials to explain, having the *cinerea* now in a growing state; still less could this be confounded with *S. caprea*, except in a very early stage of our knowledge of the subject.

S. aquatica is much smaller in all its parts than *caprea*, and as the latter naturally prefers a dry soil, the former is mostly found in wet places, in a bushy form, over hanging ponds, and covering swamps. Either species will indeed grow almost any where by culture. It bears catkins in April, which are cylindrical, with small brown-tipped hairy scales, and an oblong nectary, to each. Capsules tapering, downy, on longish stalks. Stigmas entire. Style very short. The leaves vary in shape and size, but are more or less obovate, downy and veiny; thin, soft and pliable, flat and not crisped or waved, in which latter particulars they differ greatly from those of *S. cinerea* and *aurita*.

1436

1736



Weissia curvirostra.

April 1. 1803. Published by Sir J. Smith, London.

GRIMMIA recurvirostra.

Blunt-curve-beaked Grimmia.

CRYPTOGAMIA Musci.

GEN. CHAR. *Fringe* simple, of 16 teeth, broadest at their base. *Flowers* terminal. *Veil* cylindrical.

SPEC. CHAR. Leaves linear-lanceolate, keeled. Capsule cylindrical. Lid cylindrical, somewhat conical, obtuse, recurved.

SYN. Grimmia recurvirostra. *Sm. Fl. Brit.* 1190. *Sibth.* 277. *Turn. Musc. Hib.* 29.

Weisia recurvirostra. *Hedw. Sp. Musc.* 71. *Crypt. v.* 1. 19. *t.* 7.

Bryum curvirostrum. *Dicks. Crypt. fasc.* 2. 7. *Dr. Pl.* 95. *Hull.* 262.

B. recurvirostrum. *With.* 829.

B. setaceum β. *Huds.* 482.

B. stellare lacustre, foliis rubris capillaceis. *Dill. Musc.* 382. *t.* 48. *f.* 45.

GATHERED by Mr. W. Borrer on some rock-work in Claremont park, Surrey, in the autumn of 1804. It is mentioned as growing in dry as well as moist places, but is not a common moss. The stems are erect, forming tufts, simple or branched, various in height, leafy, perennial. Leaves spreading loosely, linear-lanceolate, acute, beardless, keeled, entire, a little revolute, curled more or less when dry, furnished with a rib; the old ones turning to a rusty red or brick colour. Fruit-stalk slender, red. Capsule erect, cylindrical, straight, slender, of a red shining brown when fully ripe, its mouth neither spreading nor contracted. Fringe delicate, white, turning reddish by keeping. Lid short, curved, red at the base, tapering, blunt when arrived at maturity. The fringe is that of a *Pterogonium*.

1439

April 1. 1805. Published by Jas. Sowerby, London.

DICRANUM rigidulum.

Rigid-leaved Fork-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps.* oblong. *Fringe* of 16 flat, cloven teeth, a little inflexed.

SPEC. CHAR. Stem erect, at length branched. Leaves awl-shaped, pointed: those on the branches curved towards one side. Capsule urn-shaped, incurved.

SYN. Dicranum rigidulum. *Swartz Musc. Suec.* 38 and 89. *t.* 3. *f.* 7. *Hedw. Sp. Musc.* 134. *t.* 32. *f.* 8—12. *Sm. Fl. Brit.* 1211. *Turn. Musc. Hib.* 62.

SENT by Dr. Scott from the neighbourhood of Dublin to Mr. Turner, to whom we are obliged for our specimens. It grows in a moist clay soil, and is perennial, forming dense tufts, conspicuous for the light shining green of the leaves, which are slender, awl-shaped, very acute, entire, with a single rib, rather rigid to the touch when dry: the radical ones are numerous, nearly erect, or spreading every way alike; those on the lateral branches that come out from near the base of the fruit-stalk, and rise as high as its top, are curved more or less toward one side. Fruit-stalk not half an inch high, red, shining. Capsule leaning and often curved, of a short urn-shaped form, spreading at the mouth, light-brown, smooth but not shining. Fringe half as long as the capsule, of a fine red, striated, the tips pale. Lid conical, swelled at the base, often beyond the diameter of the capsule. Veil awl-shaped, straight, often reddish.

In barren situations, or dry seasons, this moss forms no lateral shoots, in which state it seems to be Mr. Dickson's *Bryum callistomum*. It is not however *Dicranum callistomum* of *Fl. Brit.*, the description of which was made from specimens of *varium*, erroneously sent for *callistomum* before I knew the real one.

1440

1682.

Trichostomum.
microcarpum.

April 1. 1805. Published by Jas Sowerby, London.

TRICHOSTOMUM microcarpon.

Small-fruited Hoary Fringe-moss.

CRYPTOGAMIA Musci.

GEN. CHAR. *Caps*: oblong. *Fringe* of 32 capillary, straightish teeth, approximated or united in pairs.

SPEC. CHAR. Leaves lanceolate, keeled, acute, with a slightly pellucid point. Capsule ovate. Stem much branched, spreading.

SYN. Trichostomum microcarpon. *Hedw. Sp. Musc.* 112. *t.* 23. *f.* 1—5. *Sm. Fl. Brit.* 1243. *Turn. Musc. Hib.* 40.

Bryum hypnoides δ. *Linn. Fl. Suec.* 392.

B. hypnoides γ. *Huds.* 480.

B. macrocarpon. *With.* 822. *Hull.* 260.

B. hypnoides alpinum, setis et capsulis exiguis. *Dill. Musc.* 370. *t.* 47. *f.* 29.

A RARE inhabitant of the rocky mountains of Scotland and Wales, found by Dillenius on Snowdon, where Mr. Griffith has since gathered it. Mr. G. Don collected our specimens on the highland mountains in August 1802, within about two yards of the snow which had already clothed their summits.

The stems are leafy and repeatedly branched, loosely spreading, and forming lax tufts. Leaves imbricated every way, but little spreading, lanceolate, entire, single-ribbed, keeled, acute, mostly tipped with a short white pellucid entire point or hair. They are of a pale green, turning black with age, and permanent. Fruit-stalks not half an inch long, pale brown, curved and twisted. Capsule erect, ovate, short, pale brown, rather wide-mouthed. Fringe red, delicate. Lid awl-shaped, straight. Veil of the same form, unequally toothed at the edge.

The name *macrocarpon* in Withering can only be an error of the press.

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Orthotrichum anomalum	1423
Hypnum splendens	1424
—— cuspidatum	1425
Lichen chloroleucus	1373
—— luteo-albus	1426
—— incurvus	1375
—— tenuissimus	1427
—— spongiosus	1374
—— alcicornis	1392
—— pyxidatus	1393
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Fucus ruscifolius	1395
—— Hypoglossum	1396
—— saccharinus	1376
—— amphibius	1428
Conferva parasitica	1429
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